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GOTHIC ARCHITECTURE,
IMPROVED BY
RULES and PROPORTIONS.
In many Grand
DESIGNS

OF
Columns, Doors, Windows, Chimney-Pieces,
Arcades, Colonades, Porticos, Umbrellos,
Temples, *and* Pavillions &c.

WITH
PLANS, ELEVATIONS *and* PROFILES;
GEOMETRICALLY EXPLAINED.

By B. & T. LANGLEY.

LONDON.

Printed for JOHN MILLAN, near Whitehall.

1747

15^s.

On the Ancient Buildings in this Kingdom.



in Gardens, Parks, &c.

By the Histories of this Nation, it does not appear that any Edifices were built by the *Goths* here, yet every ancient building, not in the *Grecian Mode*, is called *Gothic*. Says *Rapin*, the *Goths* (also called *Jutes* and *Wittes*) were originally *Itinerants* in *Germany*; who, before the *Saxons* came into *Britain*, united with them, and were called *Saxons*.

ABOUT 449, when the *Romans* left *Britain*, *Hengist* and *Horsa* came here with nine Thousand *Saxons*, to assist King *Vortigern* against the *Scots* and *Picts*, many of which were *Goths*, tho' called *Saxons*, and were the first that came here.

In 530, when the *Saxons* had conquered the *Hptarchy*, Numbers of *Goths*, with their Families, came to *Britain*, and uniting with the *Saxons*, their Posterity became *Saxons* also.

In all Ages of the *Saxon* Monarchy, the Edifices were called *Saxon*, and not *Gothic*; tho' it was allowed, that the *Goths* taught the *Saxons* to build.

WHAT the *British* and *Roman* Buildings were before the *Saxons*, we have no Account of.

ETHELBERT V. King of *Kent*, and the first Christian *Saxon* King, converted *Sebert*, in 605, and assisted him in building *St. Peter's*, *Westminster*, in a Place called *Thornez*, from the first Christian Church, built there by *Lucius*, King of *Britain*, in 183, overgrown with Thorns, &c. In this Place (saith *Sulcardud*) the Temple of *Apollo* stood, when *Antoninus Pius* was Emperor of *Rome*, and being after thrown down by an Earthquake, upon its Ruins, *Sebert* built and dedicated it to *St. Peter*, as *Lucius* had.

ETHELBERT also assisted *Sebert*, about 610, to build *St. Paul's* Cathedral, formerly the Temple of *Diana*.

The last 400 Years of the *Saxon* Monarchy, they built Cathedrals, Churches, Chapels, &c. to the *Danes*, from 679, to 1001, where nothing was to be seen but Murders, Conflagrations, Plundering, &c. so that in the Year 1017, when King *Edmund* was murdered by *Edrick*, and *Canutus* had made himself the first *Danish* King of *England*, all the venerable Buildings raised by the *Saxons* (*St. Paul's* only excepted) were in frightful Ruins.

By the *Danish* Conquest, Posterity was deprived, not only of the *Saxon Architecture*, but of the Geometrical Rules, by which their Buildings were designed, &c. we must suppose that many ingenious Architects in those Times, who had composed Rules, which, with them, were buried in Ruins; and notwithstanding that all Buildings after erected might have a Similitude to the *Saxon*; yet 'tis doubted, if any of them came up to that Beauty of Order.

THE principal Buildings that have been erected in this Kingdom from 1017, to King *James I.* when *Inigo Jones* lived, who first introduced the *Grecian Architecture* in *England*, are the following, viz.

THE *Danes* continued 26 Years, *Canutus* built *Ashdon* in *Essex*, *St. Bennet* in *Norfolk*, and a stately Church and Monastery at *St. Edmundsbury*; but *Hardicute*, the third and last King, burnt the City of *Worcester*.

KING EDWARD, the Confessor, 1043 to 1066. He rebuilt *St. Peter*, and a Convent adjoining, which *Sebert* had erected, and new-built *St. Margaret's*, *Westminster*, where it now is: It formerly joined the South Cloister of the old Abbey, part of which is now standing. It is reasonable to believe

that it was built by *Sebert* when he built *St. Peter*, or soon after.

WILLIAM the Conqueror 1067, to 1087, the Abbeys at *Battel* in *Suffex*; *Selby*, *Yorkshire*; *St. Saviours*, *Southwark*; the Priory of *St. Nicholas* at *Exeter*; and the Town of *Newcastle* on *Tyne*, founded; the Foundation of *St. Paul's* Cathedral begun, after having been burnt by Lightning; the white Tower of the Tower of *London* in 1078, the Minster at *York*, burnt by the *Danes*; the Castles at *Oxford*, *Exeter*, *Nottingham*, *York*, *Lincoln*, *Huntington* and *Cambridge*, the new Church at *Salisbury*, built; and the Castle of *Warwick* repaired.

WILLIAM II. 1087, to 1100, the Abbeys at *Shrewsbury*, *Merton* in *Surry*; *Lewes* in *Suffex*, the Hospital of *St. Leonard* at *York*, the Monastery at *Norwich*, the Cathedral of *Salisbury*, and *University College*, *Oxford*, founded. The Cathedral Church of *Lincoln*, begun. The Abbey at *Wenlock*; a Fort at *Newcastle*; a Castle at *Ledes* in *Kent*; a new Wall about the Tower of *London*, and a great Hall at *Westminster*, 270 Feet in Length, and 70 in Breadth, built.

Carlisle City, destroyed by the *Danes*, rebuilt.

LONDON-BRIDGE rebuilt with Timber, the Abbey of *St. Albans*, and the Church at *Rocheſter* repaired.

HENRY I. 1100, to 1135, the Cathedral of *Exeter*, *St. Mary-Overy* in *Southwark*, the new Church and Cathedral at *Tewksbury*, the Priors of *Dunstable*, *Holy Trinity*, now called *Christ's Church*, *London*, *St. Bartholomew*, and its Hospital in *Smithfield*; *Kenilworth*, *Norton* in *Cheshire*, *Merton*, and of *Osney* near *Oxford*: The Abbeys of *Cirenceſter*, *Reading*, *Thirbourn*, *Cumbermere*; *New Abbey* without *Wincheſter*; and of *Merival* in *Warwickſhire*: The Monastery of *St. John* at *Colcheſter*; of *St. Andrew* at *Northampton*; and of *Plimpton* in *Devonſhire*; the House of *St. John of Jeruſalem*, near *Smithfield*; the College of *St. Mary* in the Town of *Warwick*, and the Hospitals of *Kepar*, and *St. Croſs*, near *Wincheſter*, all founded. The Priory of *St. James* in *Bristol*; the Castles of *Bristol*, *Cardiffe*, *Malmſbury*, *Skirbourn*, *Windſor*, and *Baynard* in *London*. The *Deviſes* in *Wiltſ*; the ſtately Church at *Salisbury*: And the Stone-bridges at *Bow*, and *Stratford* in *Effex* (the first in *England*) built; the Abbey of *Kenſham*, and Castle of *Norham* on the Banks of *Tweed*, begun.

STEPHEN, 1135, to 1154, the Abbeys *Cogſhall* in *Effex*, *Furnes* in *Lancaſhire*, *Harquilers* and *Feverſham* in *Kent*; of *Stratford Langthorn* near *London*; *Boxley* in *Kent*; *Non-Eaton* in *Warwickſhire*; *Fitley*, *Riewal*, *Newborough*; *Beeland*, and *Kirkſtead* in *Yorkſhire*, and many others, founded; more Abbeys (*Baker* ſays) were erected in this Reign, than in a 100 Years before.

AT *Heigham* in *Kent*, a Houſe for *Black Nuns*, and at *Carew*, a Houſe for *White*, founded; *St. Katherine's* Hospital by the Tower, new built.

HENRY II. 1154, to 1189, the Abbeys of *Bordeſley* and *Wigmore*; Priors of *Dover*, *Stoney*, *Basinwork*, the Church of *Rudlan*, and the Stone-Bridge at *London*, founded. The Monastery of *St. Auguſtine* in *Bristol*, of *Gorendon*, of *Leiceſter* (called *St. Mary de Pratis*) of *Eaton*, and *Glouceſter*, the Castle of *Ongar* in *Effex*, built: 1181, the Temple Church in *London* finiſhed; 1183 *Lambeth-Palace* begun.

RICHARD I. 1189, to 1199, the Tower-Wall new built, and the Ditch made round it; a Monastery at *Weſt-Durham* in *Norfolk* founded; another begun at *Wolverhampton* in *Staffordſhire*, and the Collegiate Church at *Lambeth* finiſhed.

JOHN, 1199, to 1216, the Abbeys of *Bowley* in the new Forest *Hampſhire*, *Black Monks* in *Wincheſter*, Monastery of *Farringdon*, and *Halſes-Owen* in *Shropſhire*, founded. *Godſtate* and *Wrowel* re-edified; the Chapel at *Knaresborough* enlarged, and the Stone-Bridge at *London* finiſhed.

HENRY III. 1216, to 1272, many Abbeys, and *St. Peter's* College in *Cambridge*, finiſhed. 1220, this King began the new Work

Work of our Lady's Chapel at *Westminster*, where the Chapel of *Henry VII.* now stands, and laid the first Stone. 1245, he caused the *Walls* and *Steeple* of old *St. Peter's*, built by *Edward* the Confessor, to be taken down; and enlarging the Church, caused it to be new built with greater Magnificence; which to effect, was the Work of the next 50 Years; at which Time its West-end came no further, than the first Columns West from the Choir; all the Part from thence, together with the two old Towers, built since, at the Expence of the Abbots.

In 1222, the Tower, and Spire of *St. Paul's* had been burnt, which in 1087 were re-built; the Stone Tower was 260 Feet from the Ground to the Top of the Battlements, the Spire, above the Battlements, 260 Feet, making 520 Feet Altitude, exclusive of the Ball and Cross, near 20 Feet more.—A matchless Structure—greatly exceeding all Buildings since raised in this Kingdom. The *Savoy* was also built about 1245.

1260, the curious inlaid Floor or Pavement yet remaining of *Jasper*, *Porphyry*, *Lydian*, *Touchstone*, *Alabaster* and *Serpentine-Stones*, was made before the high Altar in *Westminster* Abbey, at the Expence of *Richard de Ware*, an Abbot of *Westminster*.

EDWARD I. 1272, to 1307, *Vale Royal* Abbey in *Cheshire* of the *Cisteraux* Order, and *Merton College* in *Oxford*, founded. *Baliol College*, *Oxford* built, *St. Peter Westminster* near finished.

EDWARD II. 1307, to 1327, *Oriel College*, *St. Mary-hall* in *Oxford*, and a Church of *Fryers*, in his Manour of *Langley*, founded.

In this Reign, Abbot *Nicholas Litlington* built the *Hall*, *Jerusalem Chamber*, the South and West Side of the great Cloister, to *Westminster* Abbey; the Granory and adjoining Tower, now the Dormitory for the King's Scholars.

EDWARD III. 1327, to 1377, East-Minster (an Abbey of the *Cisteraux* Order) near the Tower of *London*; *King's*, *Trinity*, and *Pembroke-halls* in *Cambridge*; *Queens*, *Exeter*, and *Canterbury Colleges*, and *Hart-Hall*, in *Oxford*; *Cobham College* in *Kent*, *Charter-house* founded. The Chapel of *St. Stephen* (now the House of Commons) and *St. Michael's Church*, near *Crooked-Lane*, built; the Chapel at *Windsor* augmented, and the Castle re-edified.

RICHARD II. 1377, to 1399, *Trinity-hall* in *Cambridge*; the Gate-house to *Ely-street* in *Holbourn*, new built; *Westminster-hall*, with its stately Porch, rebuilt in 1397.

HENRY IV. 1399, to 1413, the Colleges at *Battlefield* in *Shropshire*, *Pomfret*; and a new College in *Winchester*, founded. *Guild-hall* began in 1411; *Rocheſter* Stone-bridge, and *Newgate* built, the last by *R. Whittington* Lord Mayor of *London*.

HENRY V. 1413, to 1422, *Bernards*, and *All-Souls Colleges* in *Oxford*, founded.

HENRY VI. 1422, to 1460, the *College Royal*, and *Queen's* at *Cambridge*, *Eaton's* by *Windsor*, and *Mary Magdalene's* in *Oxford*, founded; the *Divinity School* in *Oxford*, *Tatſhall College* in *Lincolnſhire*, and *Leaden-hall* built.

EDWARD IV. 1460, to 1483, laid the Foundation of the new Chapel at *Windsor*, *London-Wall* rebuilt from *Cripplegate* to *Bishopsgate*; *Bishopsgate* rebuilt.

HENRY VII. 1485, to 1508, *John Islip* said to be the Architect, an Abbot of *Westminster*, in 1500, built that House in which the *Dean* of *Westminster* lives, and set up the Statues of all the Kings and Queens that had been Benefactors to that Church. The Chapel of our Lady, built at *Westminster* by *H. III.* was taken down in 1502, and a new one of much greater Dimensions begun in its Place with Stone, said to be brought from *Huddlestone Quarry* in *Yorkshire*.

This Building, commonly called *Henry VIIIth's* Chapel, is of a quite different Mode, or Order of Architecture, from that of the *Abbey*, built by *Henry III.* the Difference much greater, than is between any two of the *Grecian Orders*.

It is to be wished that the Architect of this Chapel had communicated the Rules by which it was erected and adorned, (*Printing* being then 30 Years in *England*, was the first performed in an old Chapel of *St. Ann* in the *Ambry*) by *John Islip*

aforeſaid, who I believe was the Architect, which *Leland* calls the *Miracle* of the World.

St. John's at *Cambridge*; *Corpus Christi*, *Brazen-nose Colleges* at *Oxford*; and *St. Paul's* School founded.

HENRY VIII. 1508, to 1547, *Christ Church College*, *Oxford*, founded; *Hampton-Court*, *Whitehall* (then *York Place*) the Old Gate near the *Tilt-yard*, and *Coventry Cross*, in 1542, built.

EDWARD VI. 1547, to 1553, *Somerſet-houſe* built by the Earl of *Herford* in 1549.

Q. MARY, 1553, to 1558, *St. John's College* in *Oxford* built.

Q. ELIZABETH, 1558, to 1603, *Sidney* and *Emanuel Colleges* in *Cambridge* founded; and the public Library at *Oxford*, built and furnished.

JAMES I. 1603, to 1625, *Hicks's-Hall* by *Smithfield*, and the *Banqueting-houſe* at *Whitehall* built—the last by *Inigo Jones*.

THE Modes in which all these Buildings were erected (the *Banqueting-House* excepted) were taken from Fragments, found among the *Saxon Ruins*, they may therefore be called *Saxon Buildings*; but why *Gothic*, I cannot account for.

THE *Saxon Modes*, under the *Gothic Appellation*, may be better understood, than was I to call them *Saxon*.

THESE Modes of Building are condemned by many, on a Supposition that their principal Parts have been put together, without Rules or Proportion; to prove the contrary, I have, in the Plates A and B as a Specimen, of the Beautiful Rules of the Ancients, illustrated the Geometrical Plans and Elevations of the Bases and Capitals, to the two Varieties of Columns, now standing in *Westminster Abbey*, viz.

FIRST, those in the Choir Part, built by *Henry III.* and from the Choir to the two Towers on the West-End, built afterward, by the Abbots of *Westminster*, wherein every impartial Judge may see, that their Members, as to Heights and Projectures, are determined and described with those beautiful Proportions, and Geometrical Rules, that are not excelled (if equalled) in any Parts of the *Grecian* or *Roman Orders*. Nor is that Delicacy and Deception, that is to be seen in them, of the same Diameters. For, tho' these Columns in the West-part of the Abbey appear to be much slenderer, weaker, and of less Diameter, than the *Corinthian* Columns, in the Portico of *St. Paul's* Cathedral (that are 4 Feet in Diameter) yet they are actually full 14 Inches more in their Diameters; and consequently they are more, than half as strong again. Because 16, the Square of the Diameter of one of *St. Paul's* Columns, is less than two Thirds of 26, eight-twelve the Square of the Diameter of one of these Columns. A Deception, not to be parallel'd, in all the Columns, yet erected, by *Greeks* and *Romans*.

It is from such Researches that I have extracted the Rules, and Proportions of these Designs; and, being in general made plain to Inspection, by Scales of equal Parts to each, needs no other Explication.

PLATE I. to XVI. 5 Columns, with 11 Entablatures.

XVII. to XXVIII. 12 Frontispieces for Doors, with their Members, geometrically described at large.

XXIX. Arcades for Piazzas, with the Geometrical Construction of their Curves.

XXX. A Colonade. XXXI. An Umbrella.

XXXII. A Portico, Entrance of a Banqueting Room, &c.

XXXIII. Six circular Windows, or Lights, over Doors.

XXXIV. Six square Windows, for Attic Stories.

XXXV. to XL. 6 Windows, for State-Rooms, Pavillions, &c.

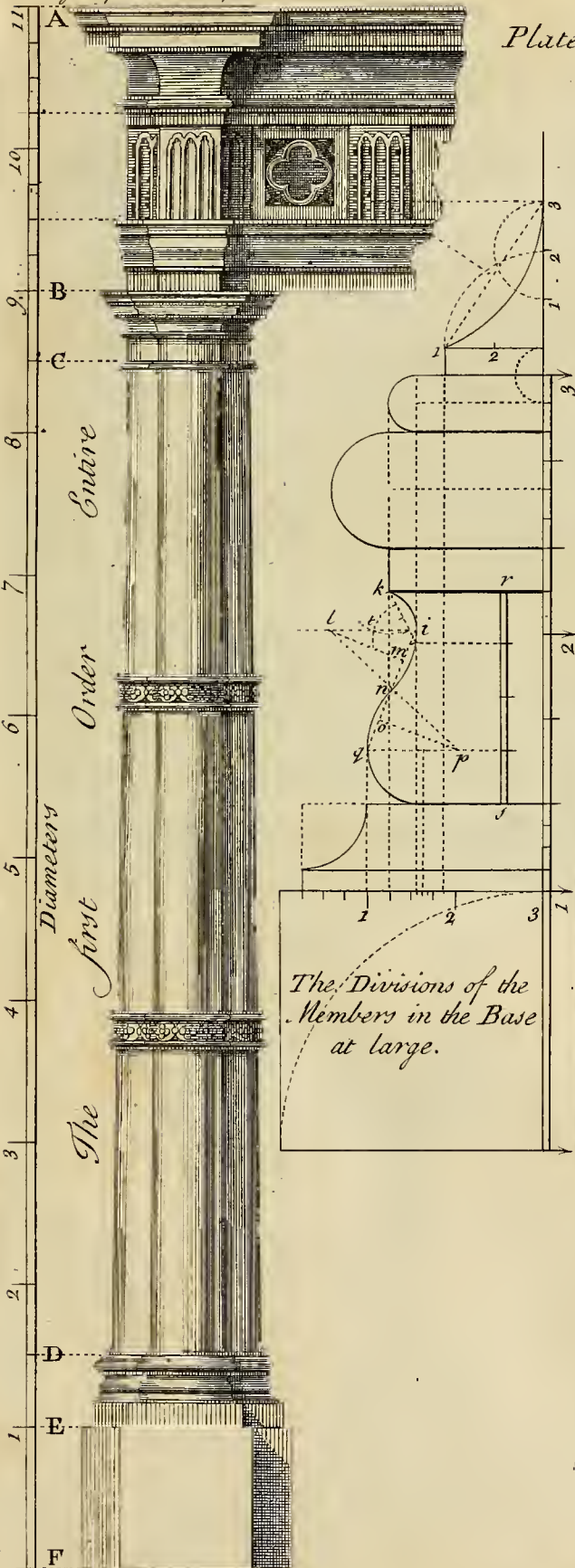
XLI. to XLVIII. Eight Chimney Pieces.

XLIX. to LXII. 14 Umbrellas, Temples, and Pavillions.

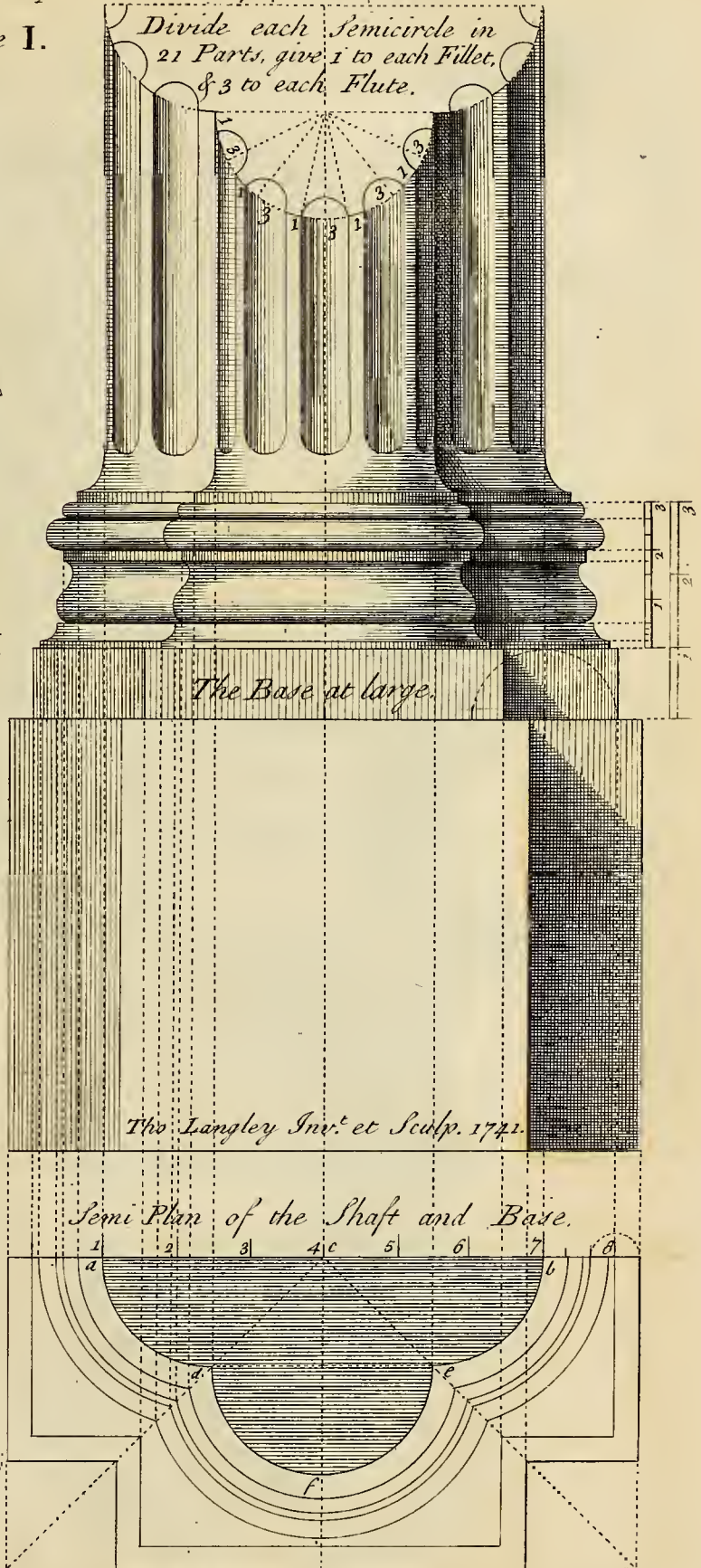
It may be objected, that the Expence of Buildings of this Kind, will be greater, than in the *Grecian Mode*; and especially by ignorant Workmen, I will undertake to erect all Sorts of Buildings in the *Saxon Mode*, if free from Enrichments, for the same Expence, as a plain Building of the same Magnitude in the *Grecian Mode*; and if enriched, for less than Ornaments used in any of the *Grecian Orders*.—And such Noblemen may find their own Materials, which will greatly abate the Expence. Jan. 31, 1747. BATTY LANGLEY.

NB. We shall first exhibit five new Orders of Columns, Plain & Enrich'd, and then shew their Use in the Forming of Designs for Frontispieces, to Doors, Windows, Chimney-Pieces, Insides of Rooms &c. in the Gothick manner.

Plate I.

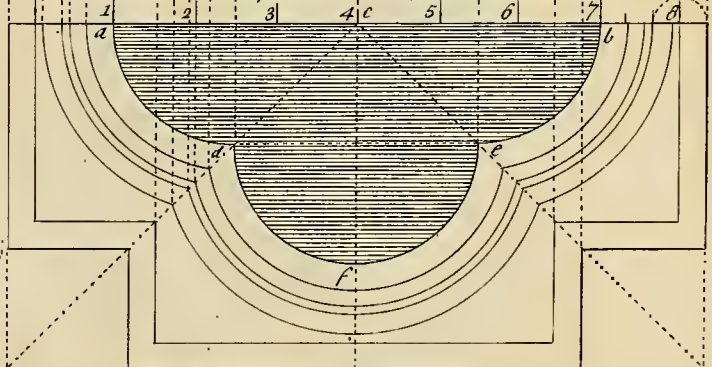


The Divisions of the Members in the Base at large.

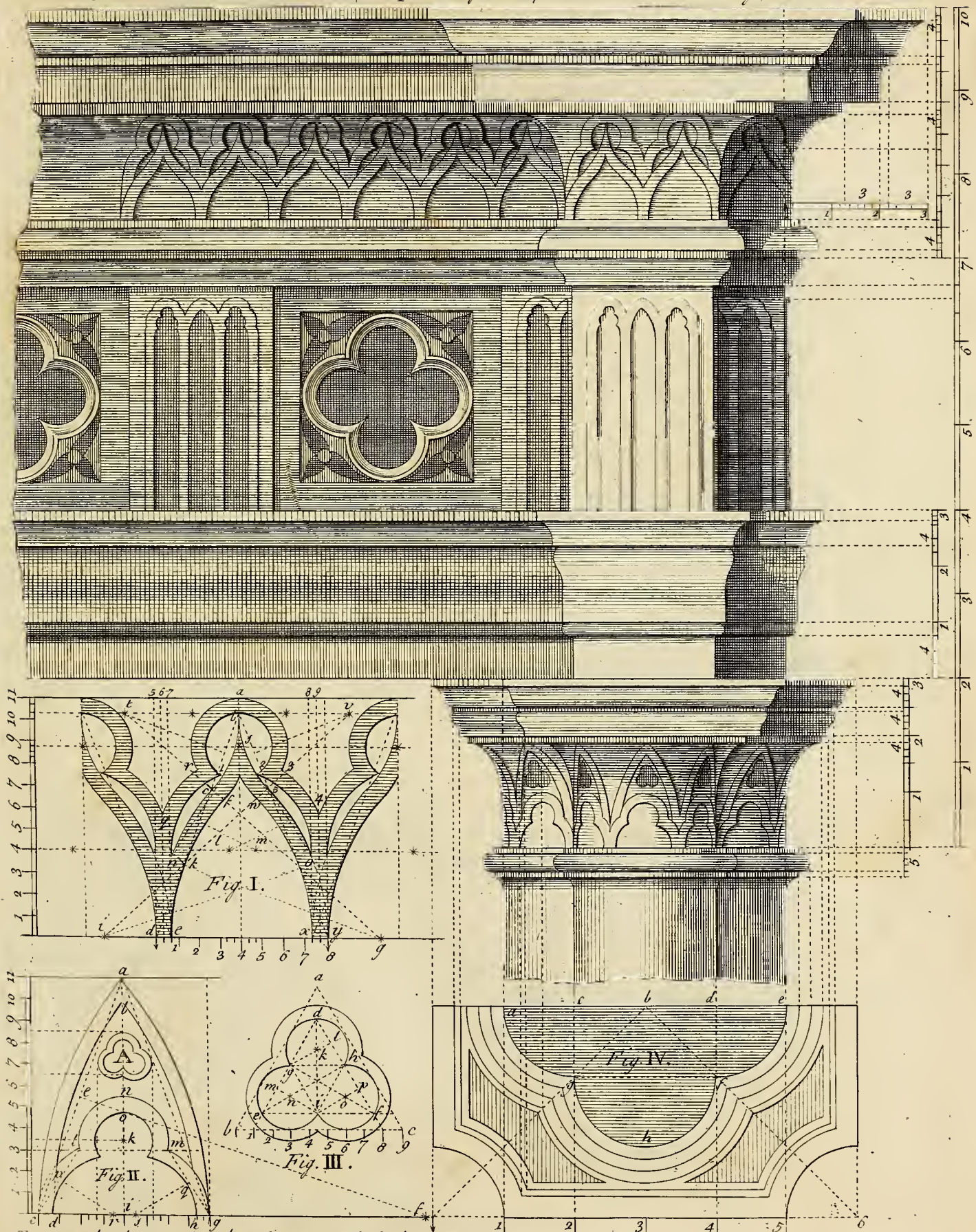


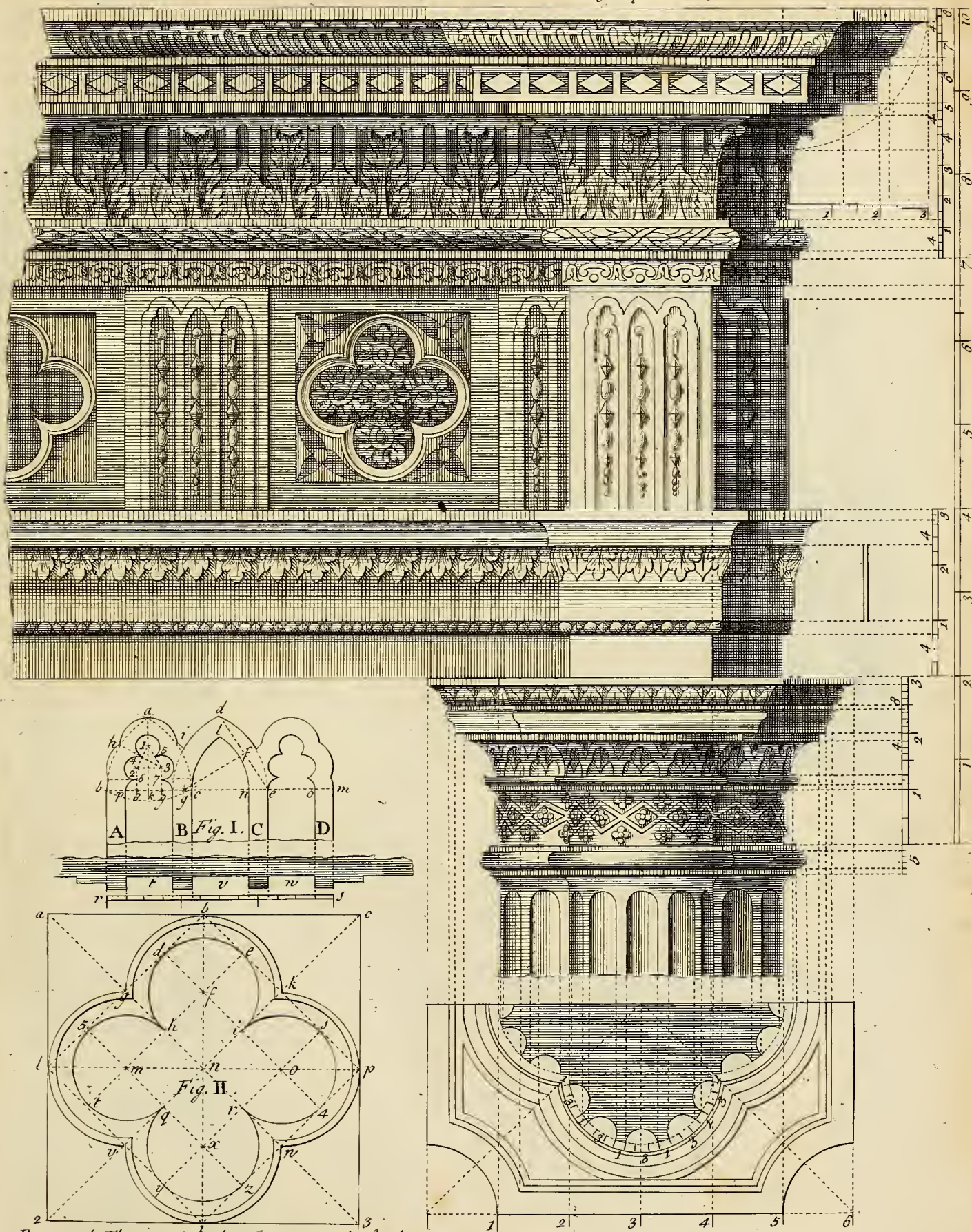
The Langley Inv.^t et Sculp. 1771.

Semi Plan of the Shaft and Base.

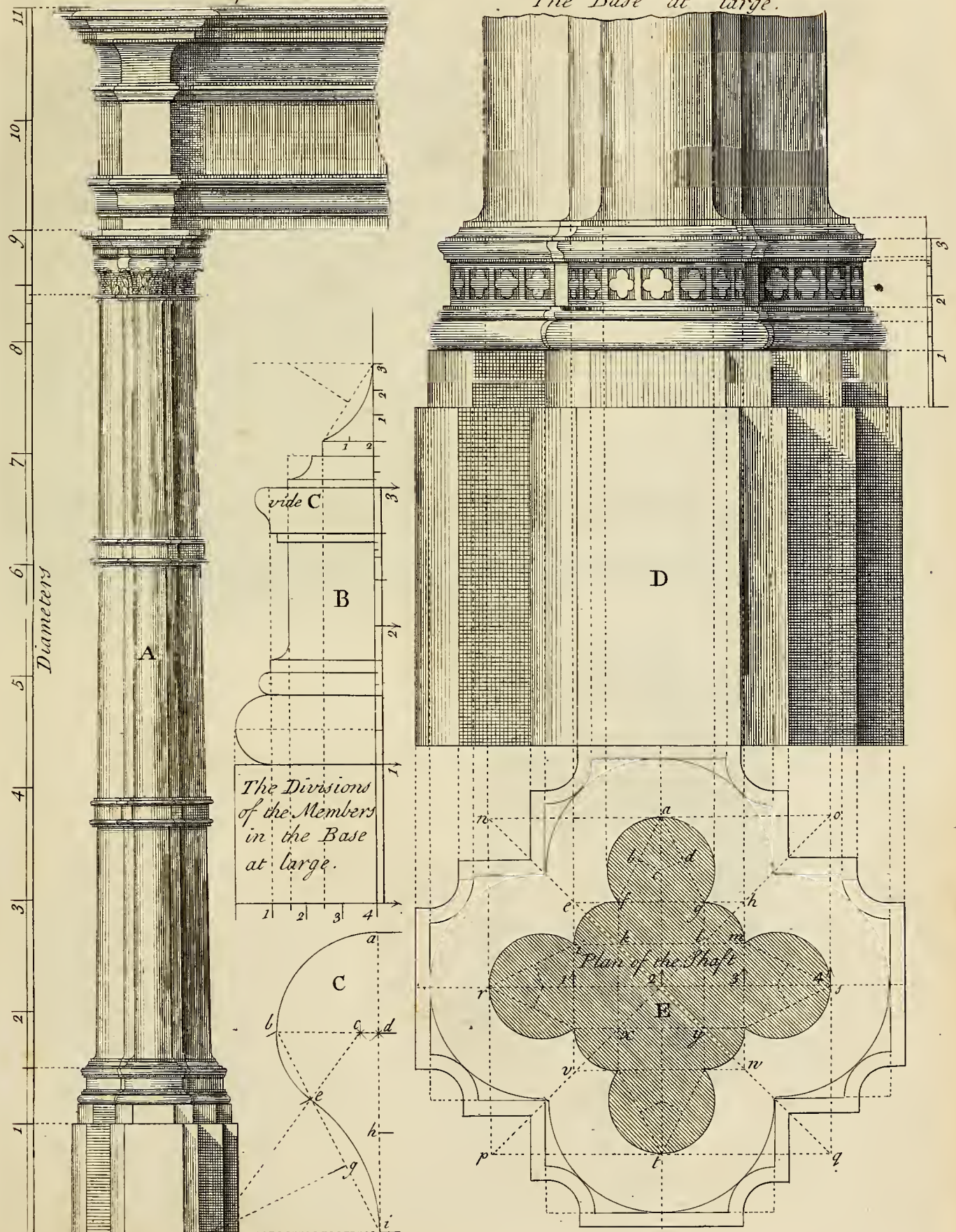


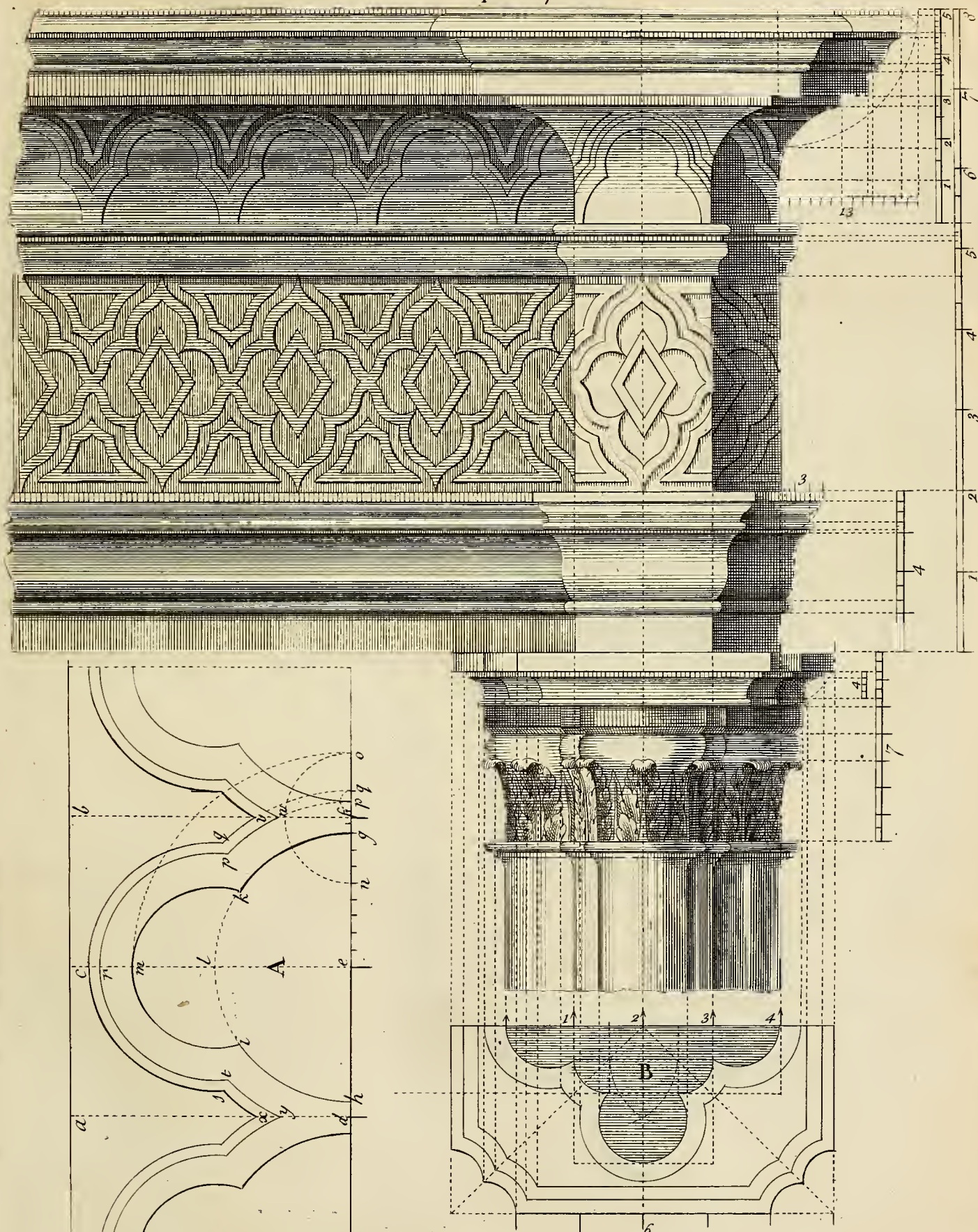
Divide AF. the entire Height into 11 Parts, give 1 to EF. the Subplinth, $\frac{1}{2}$ the next to DE. the Base; the next 7 to CD the Shaft; the next $\frac{1}{2}$ to BC the Capital, and the upper 2 to AB the Entablature.

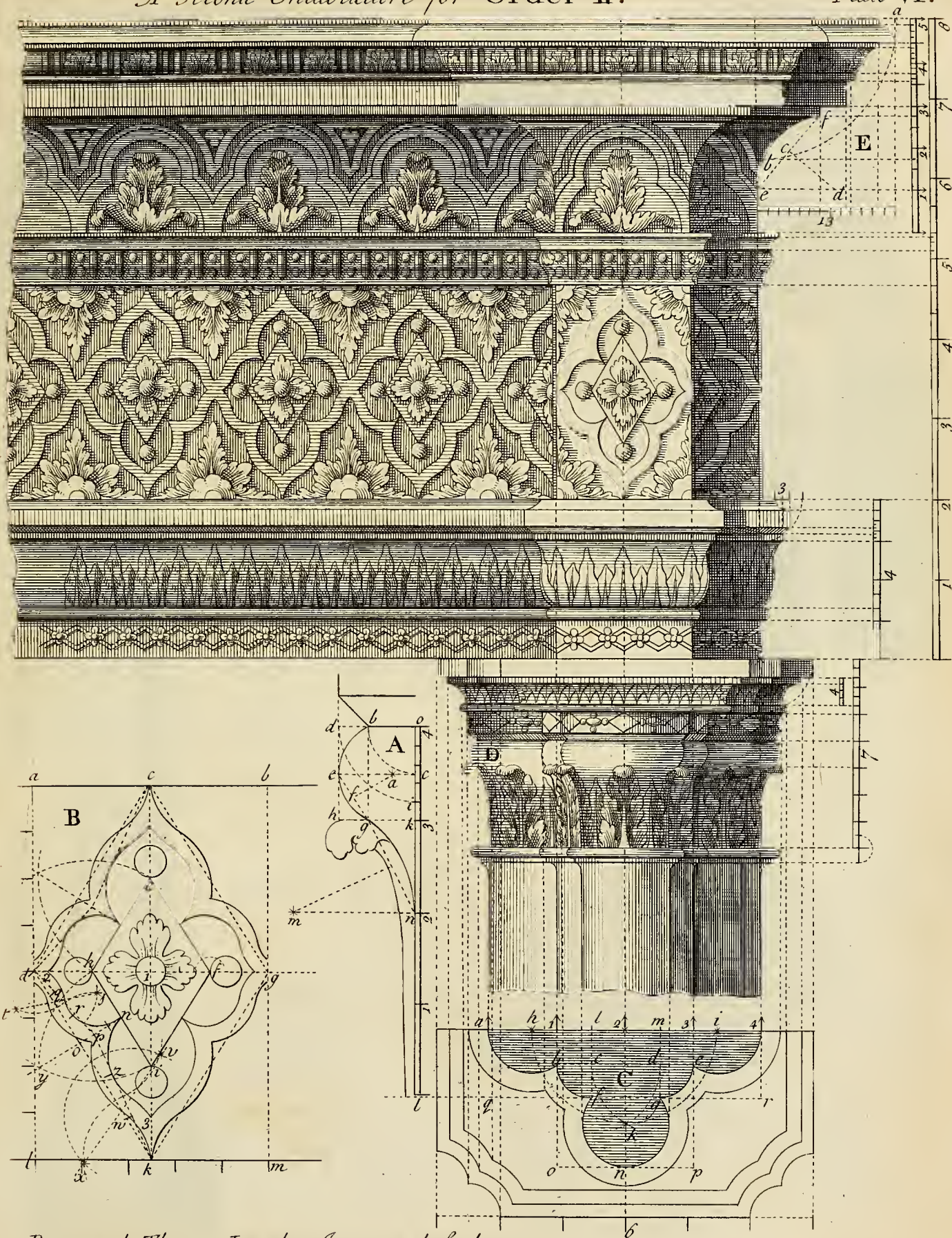


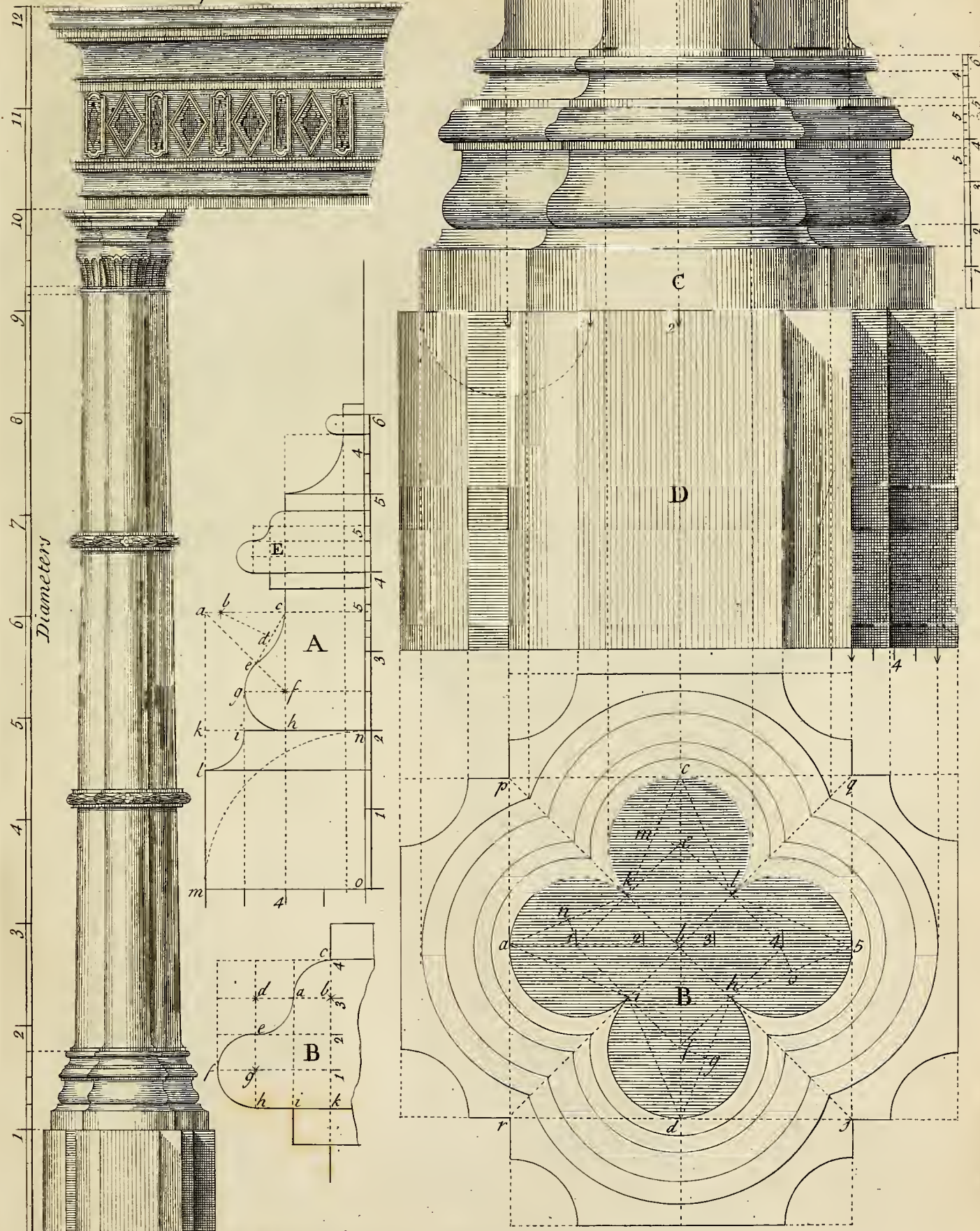


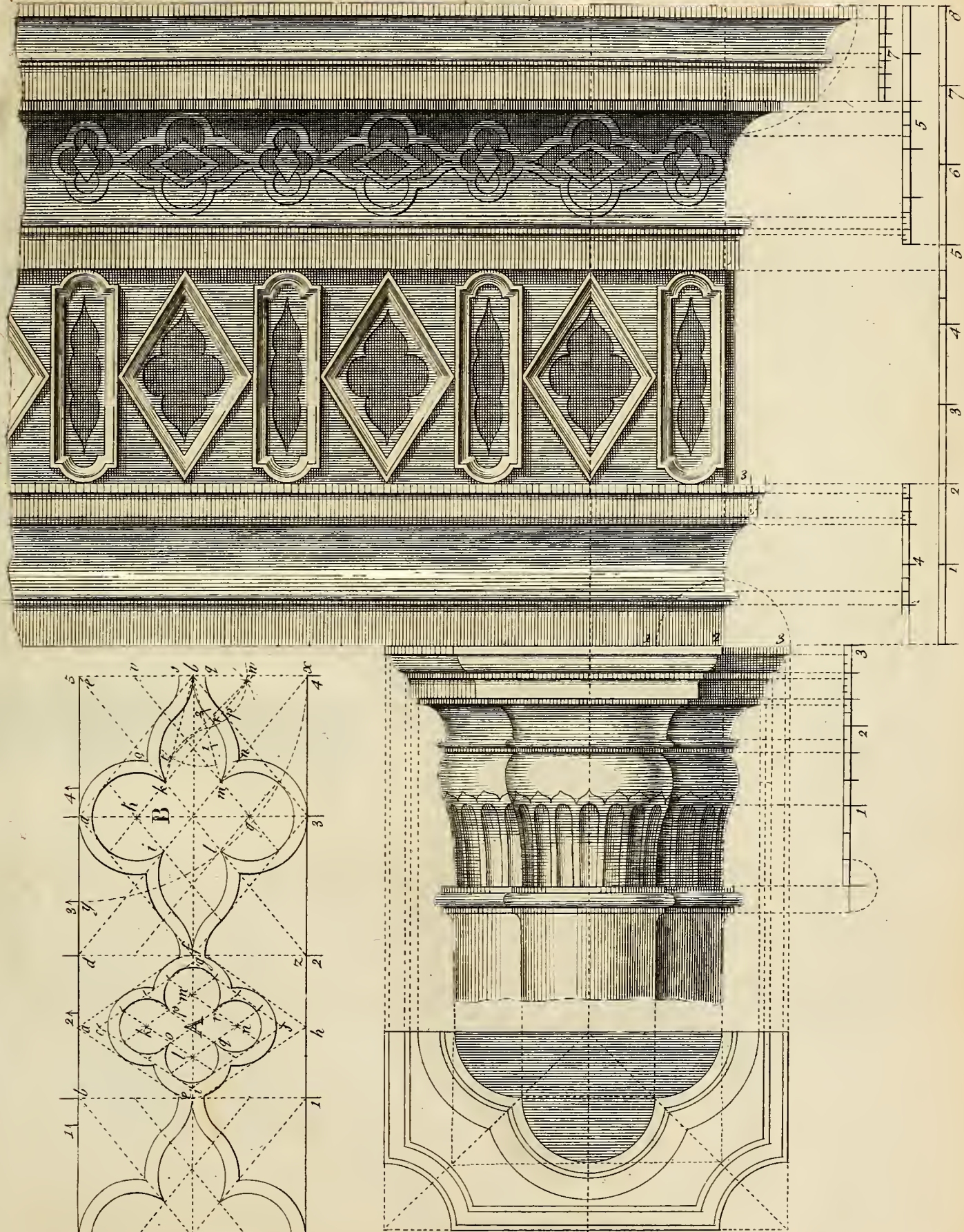
The Base at large.

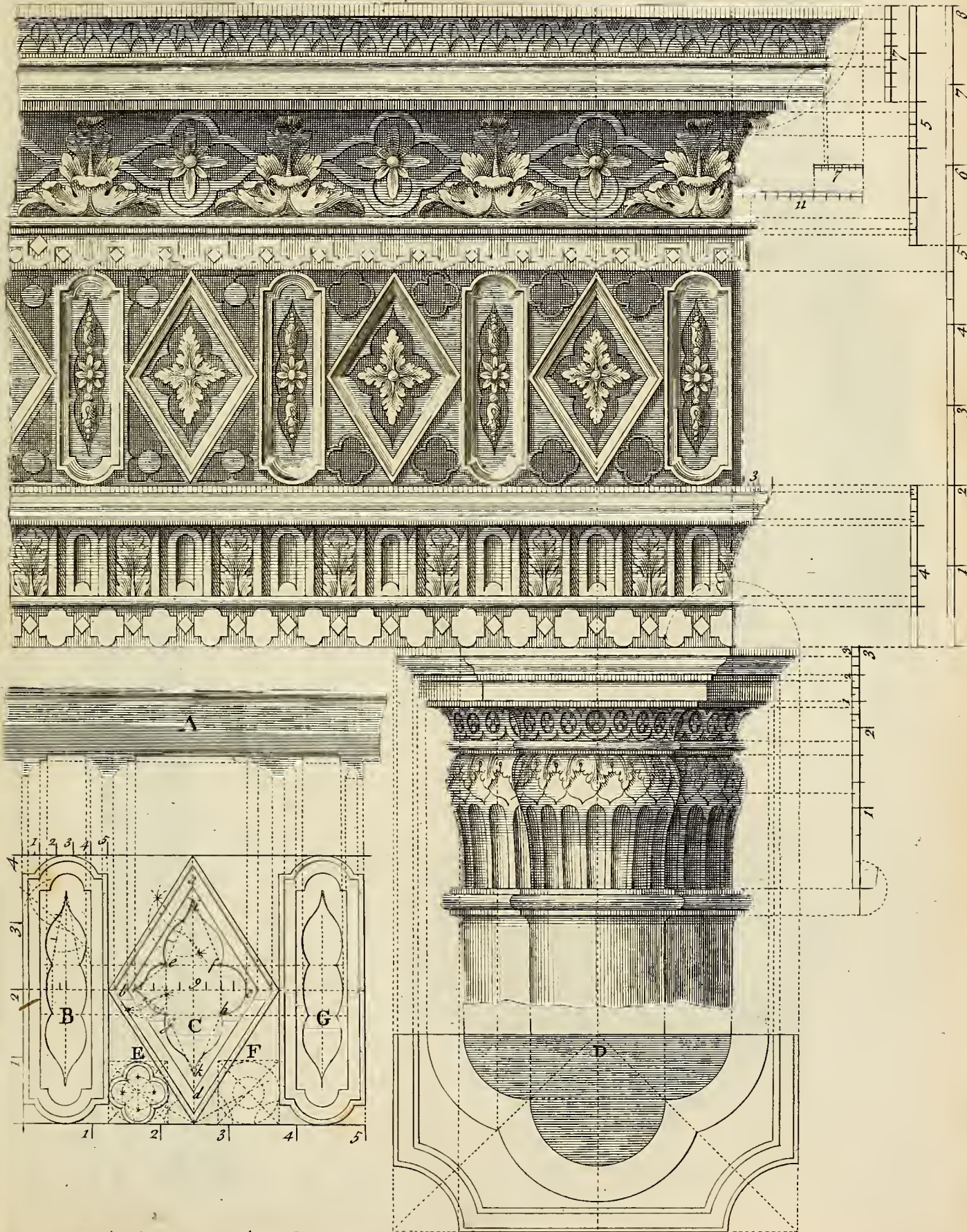


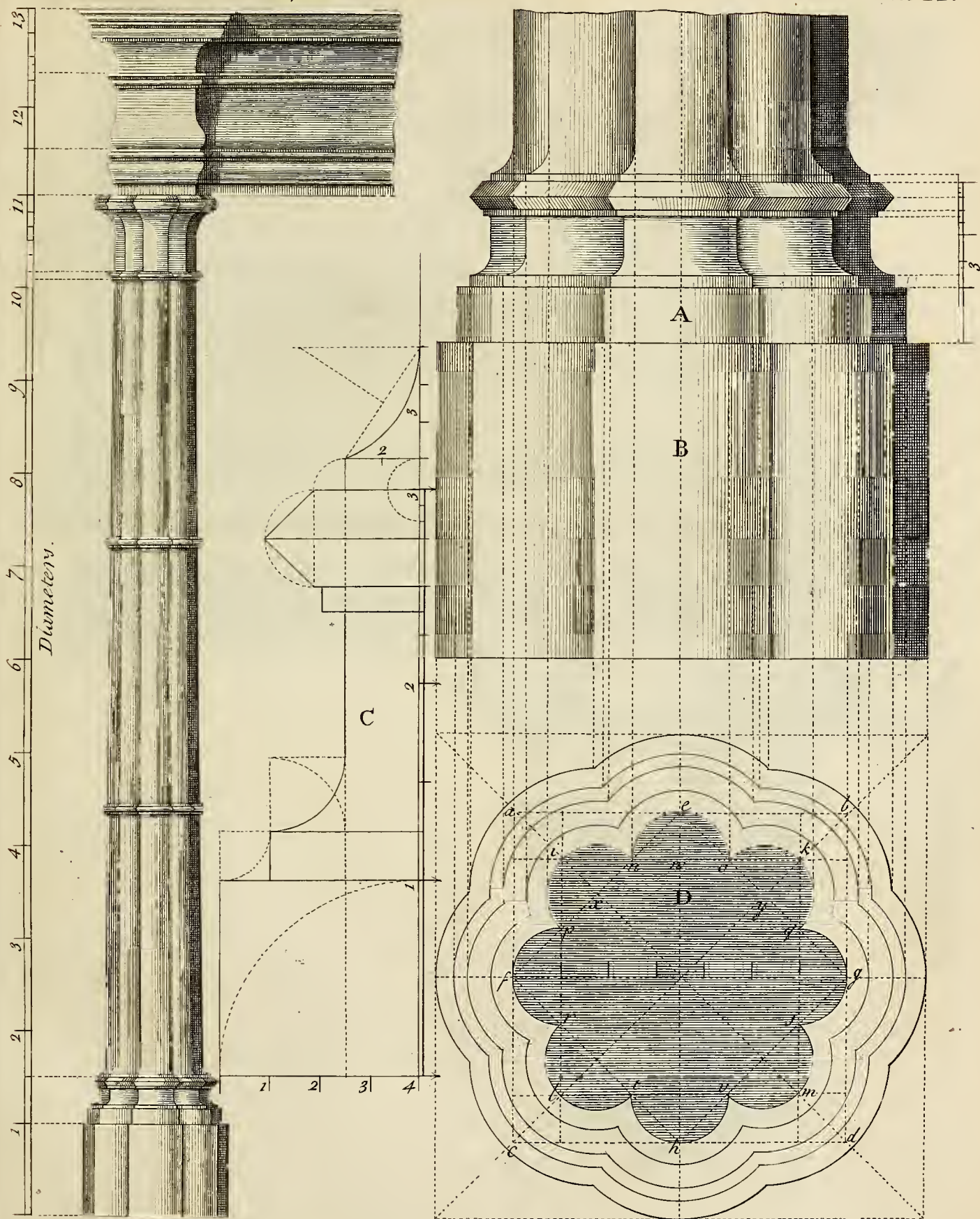


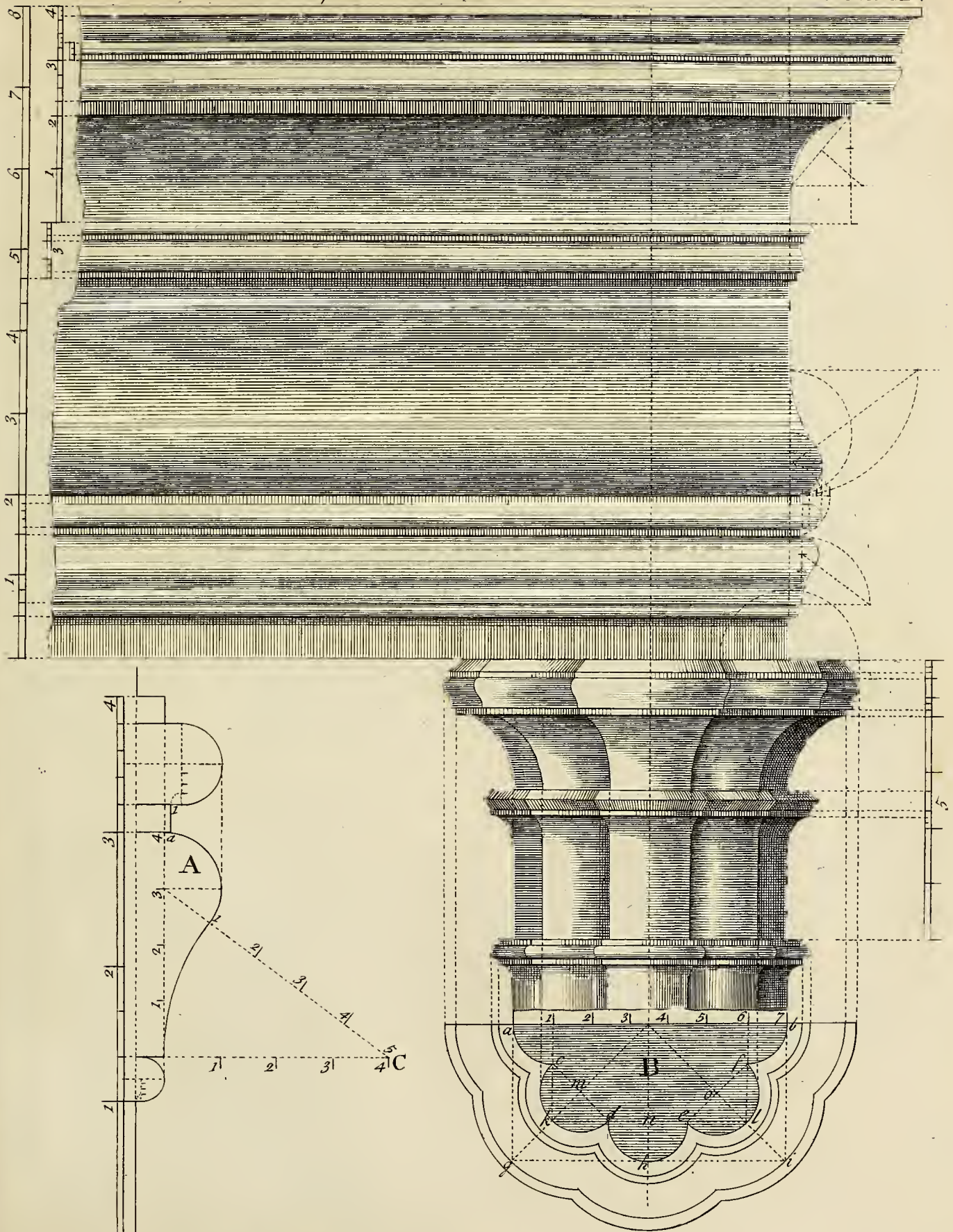


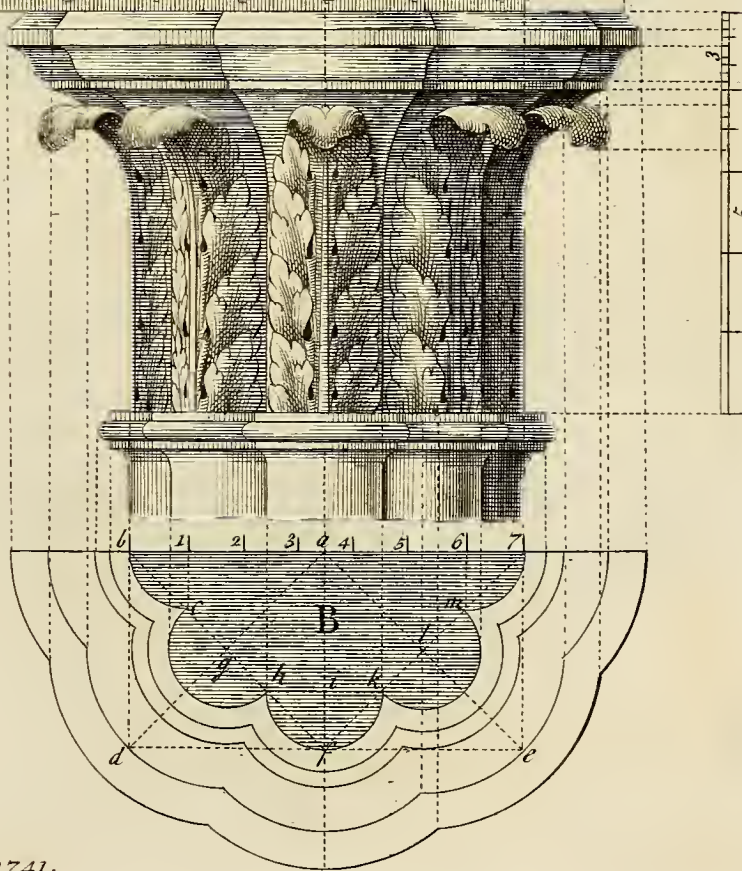
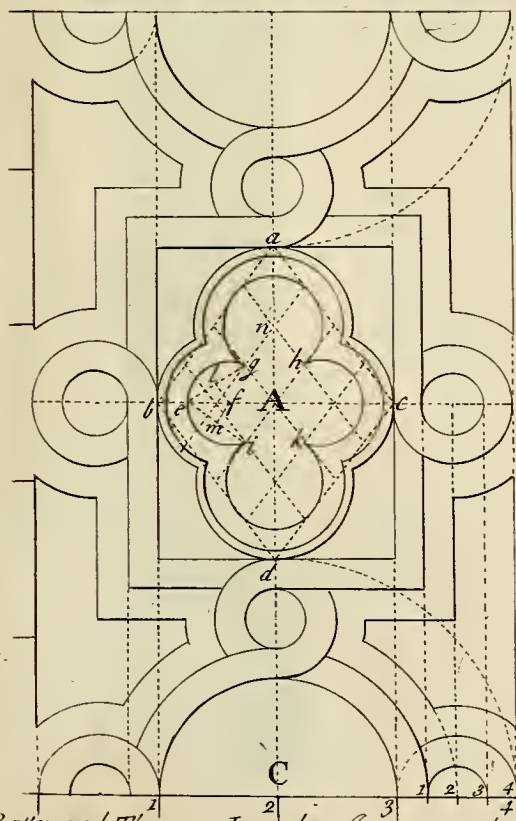
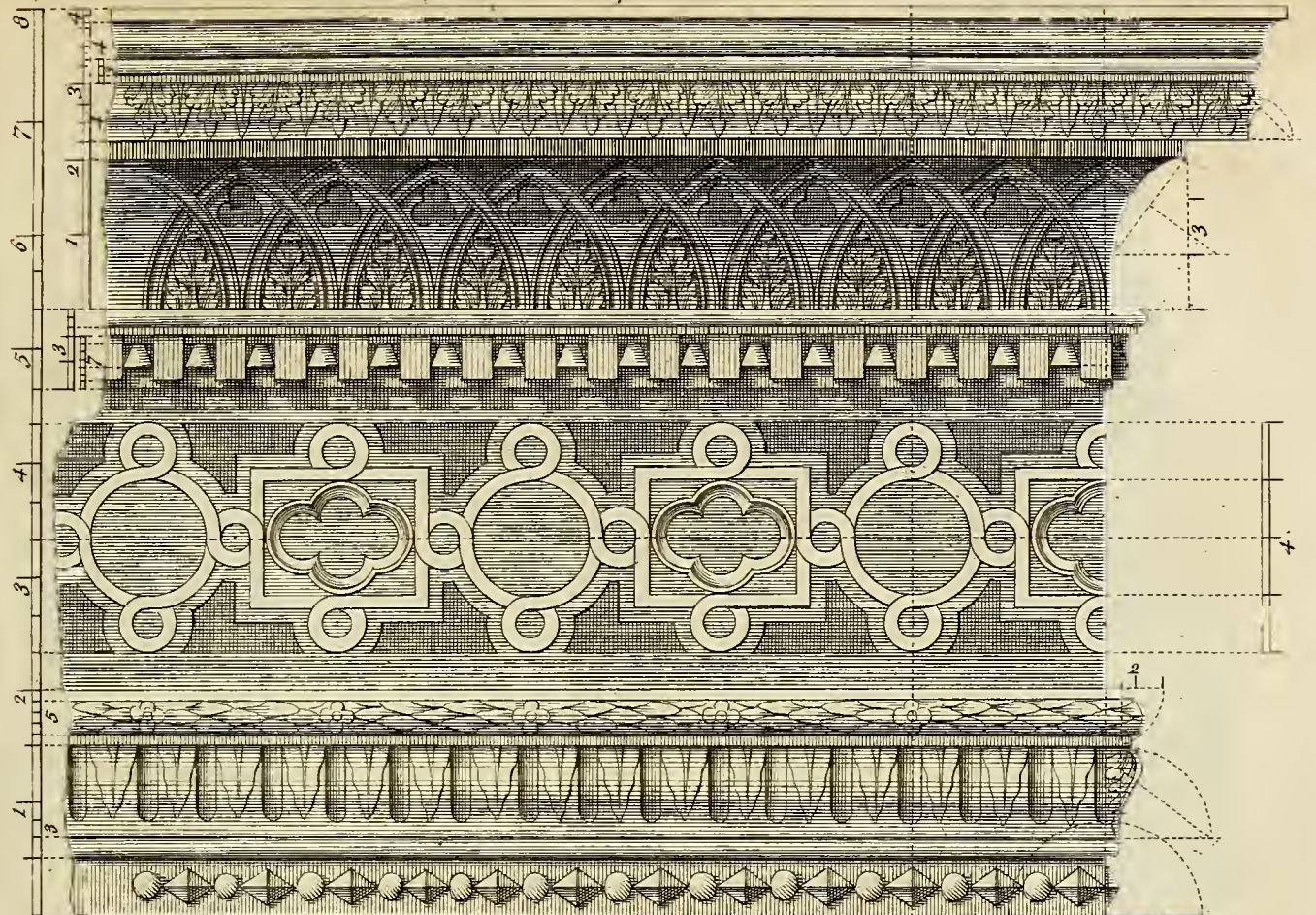


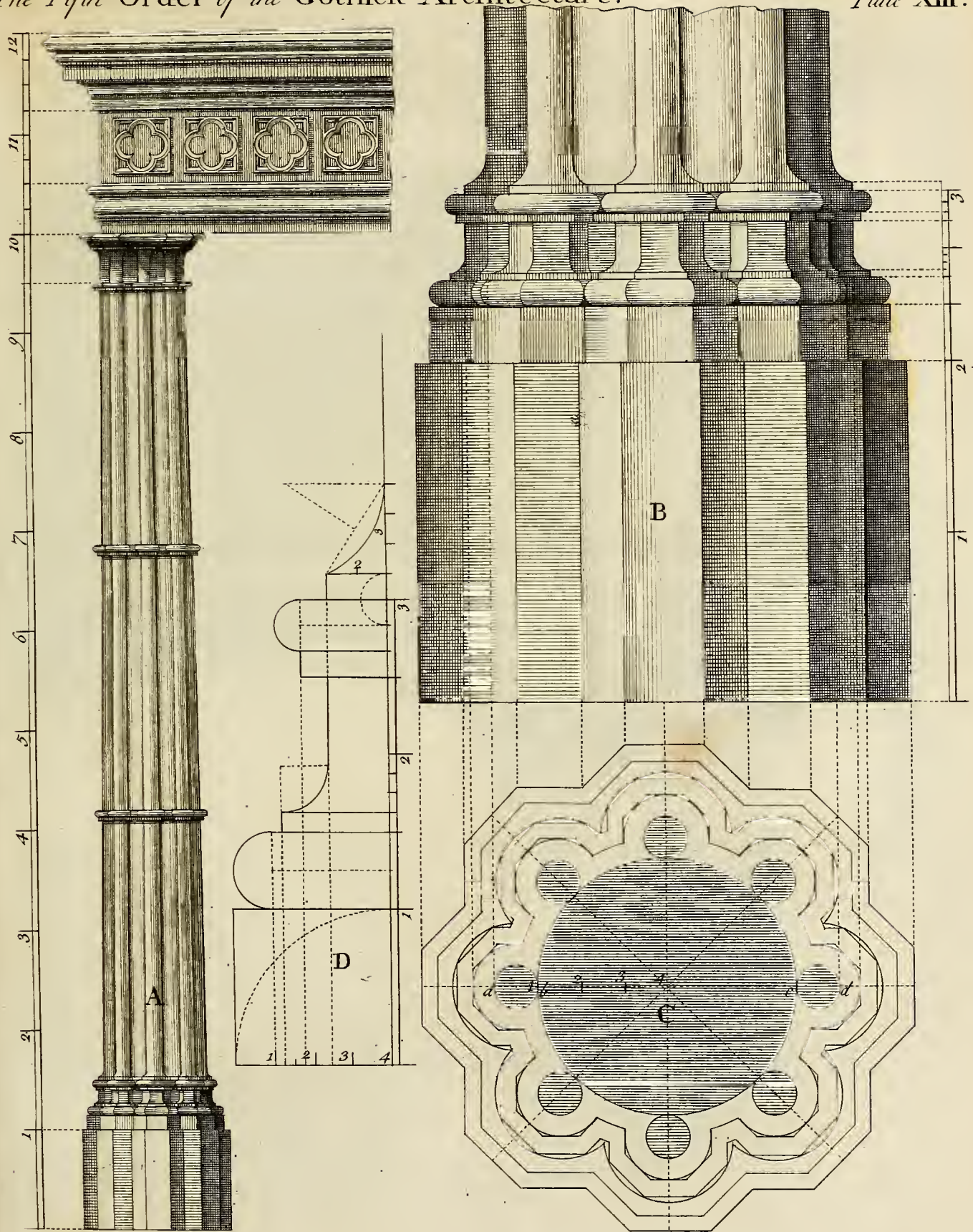


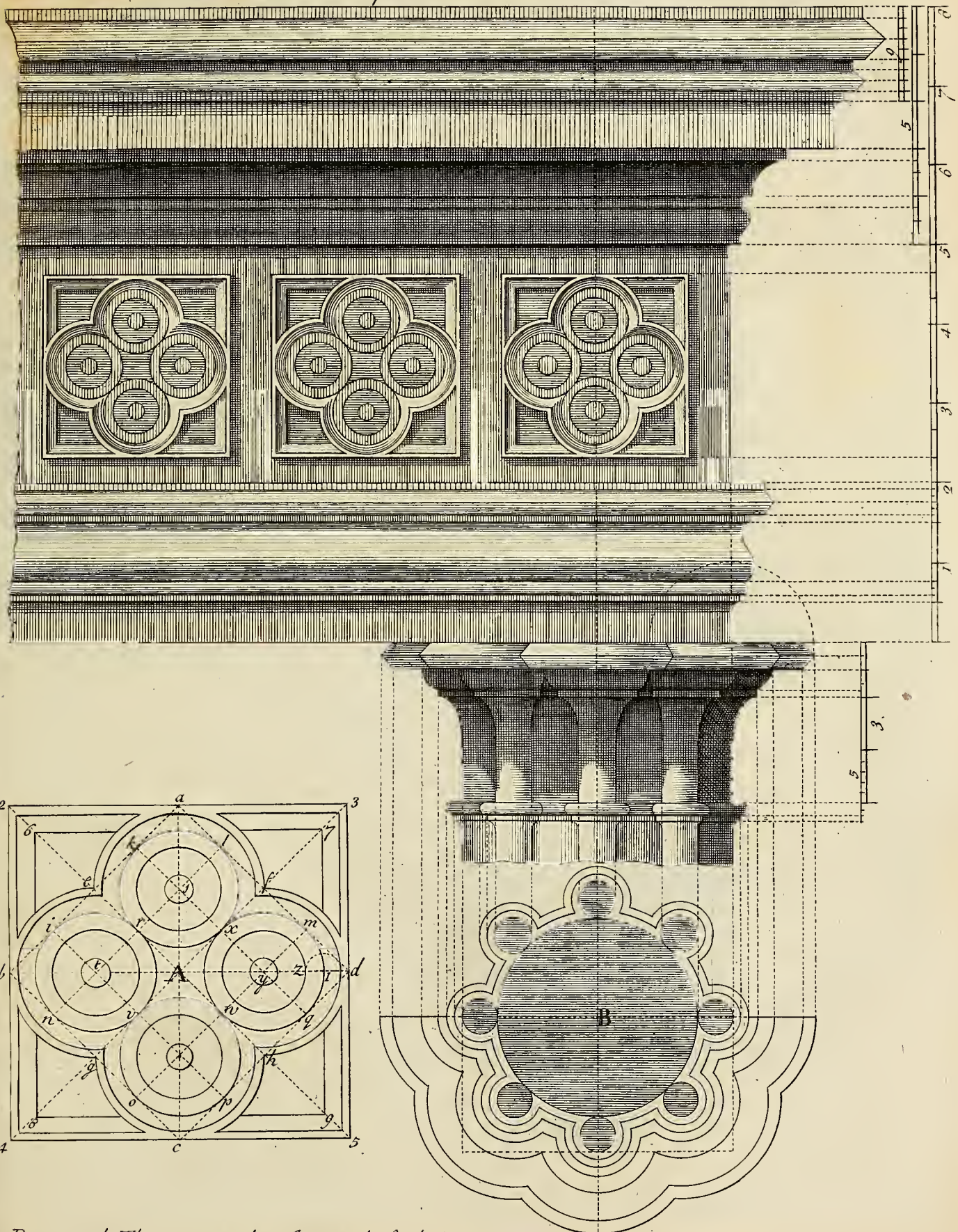


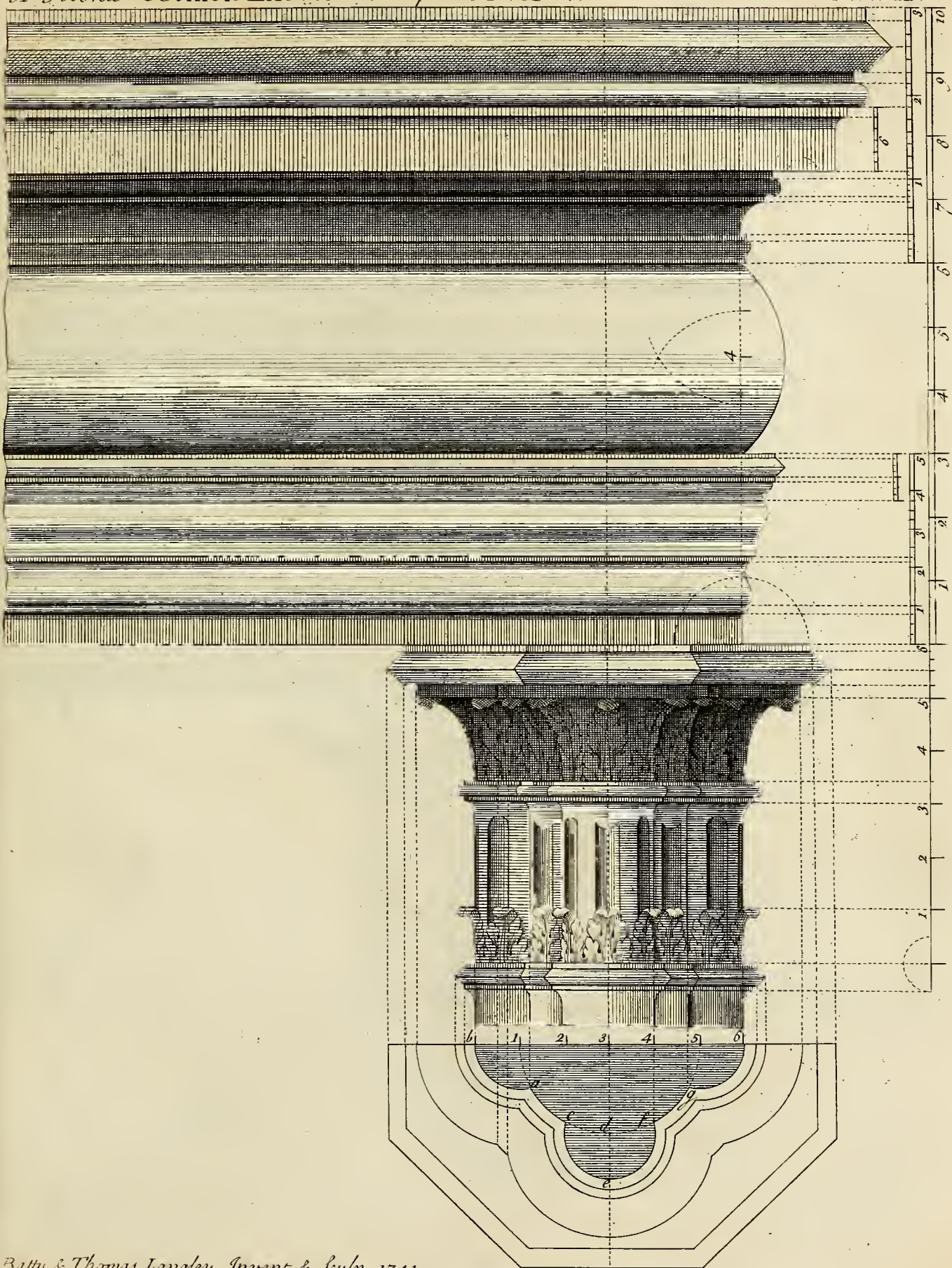


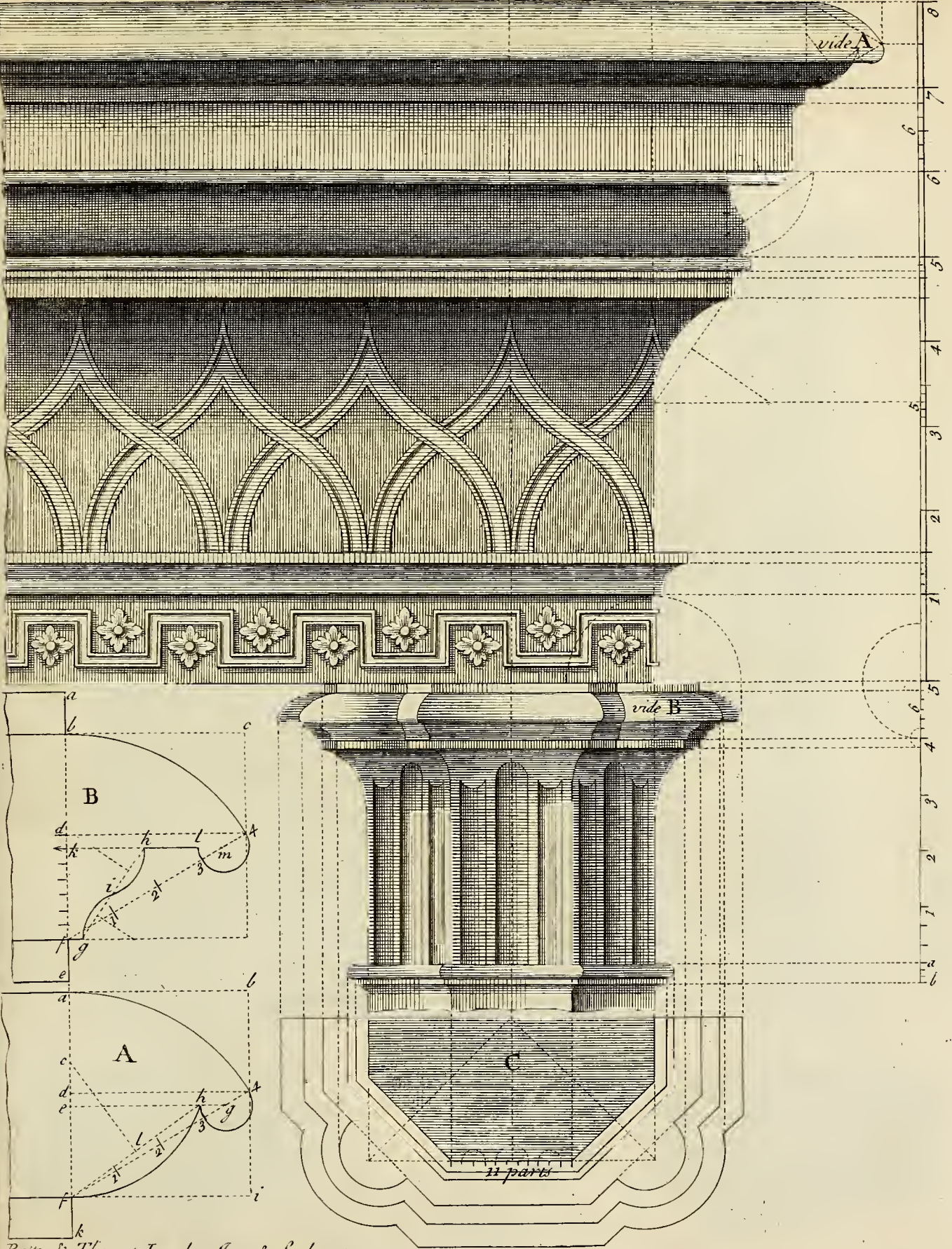


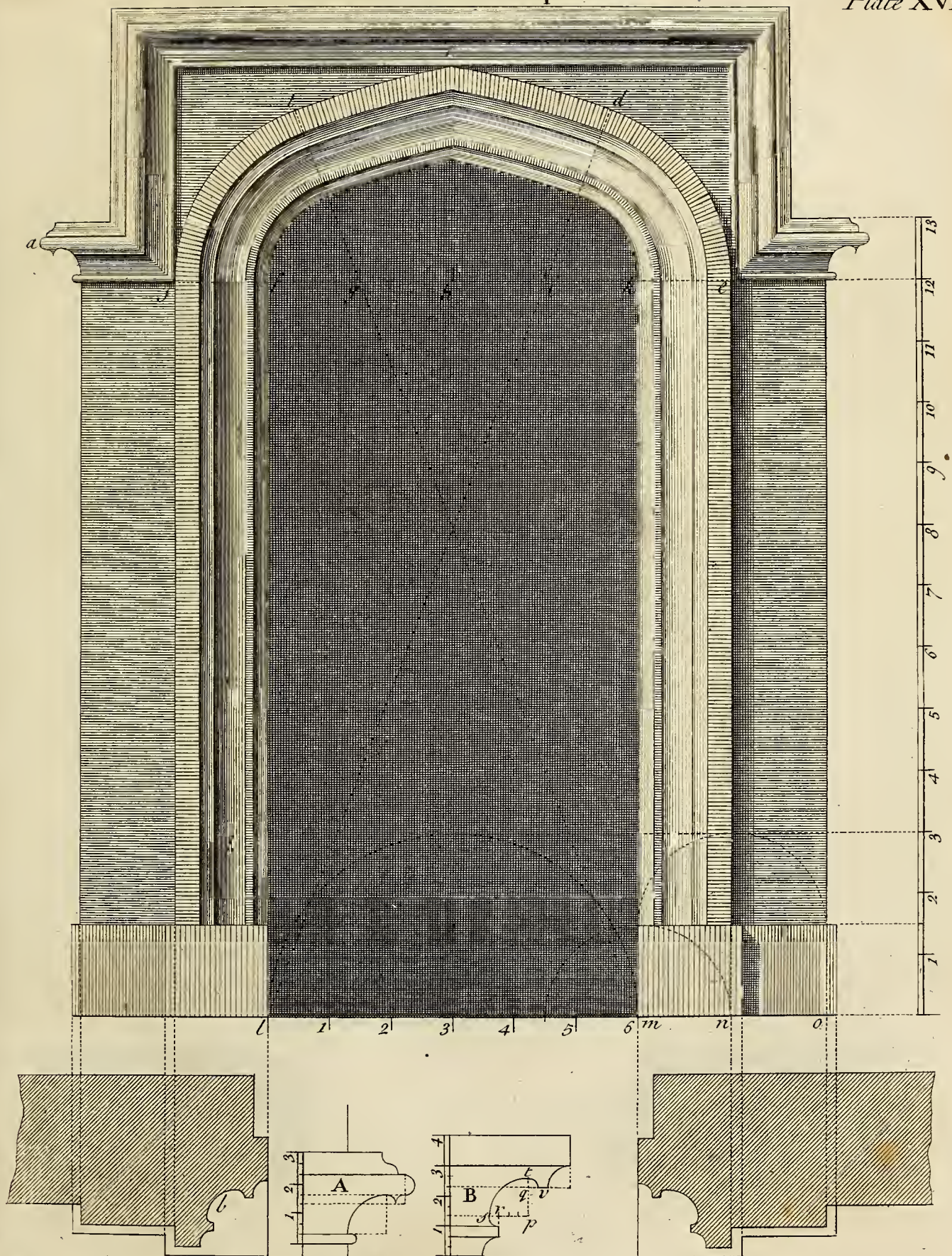




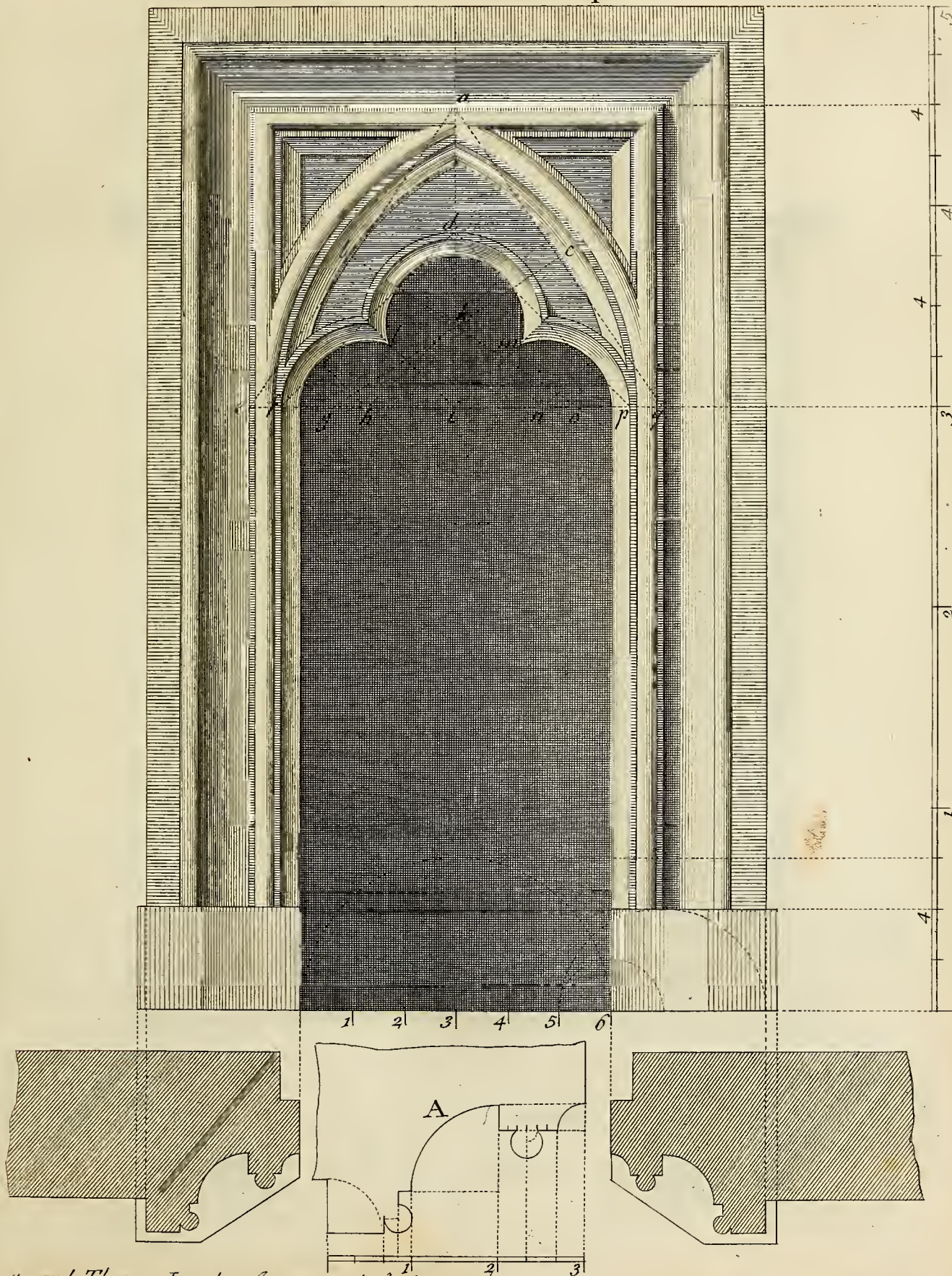


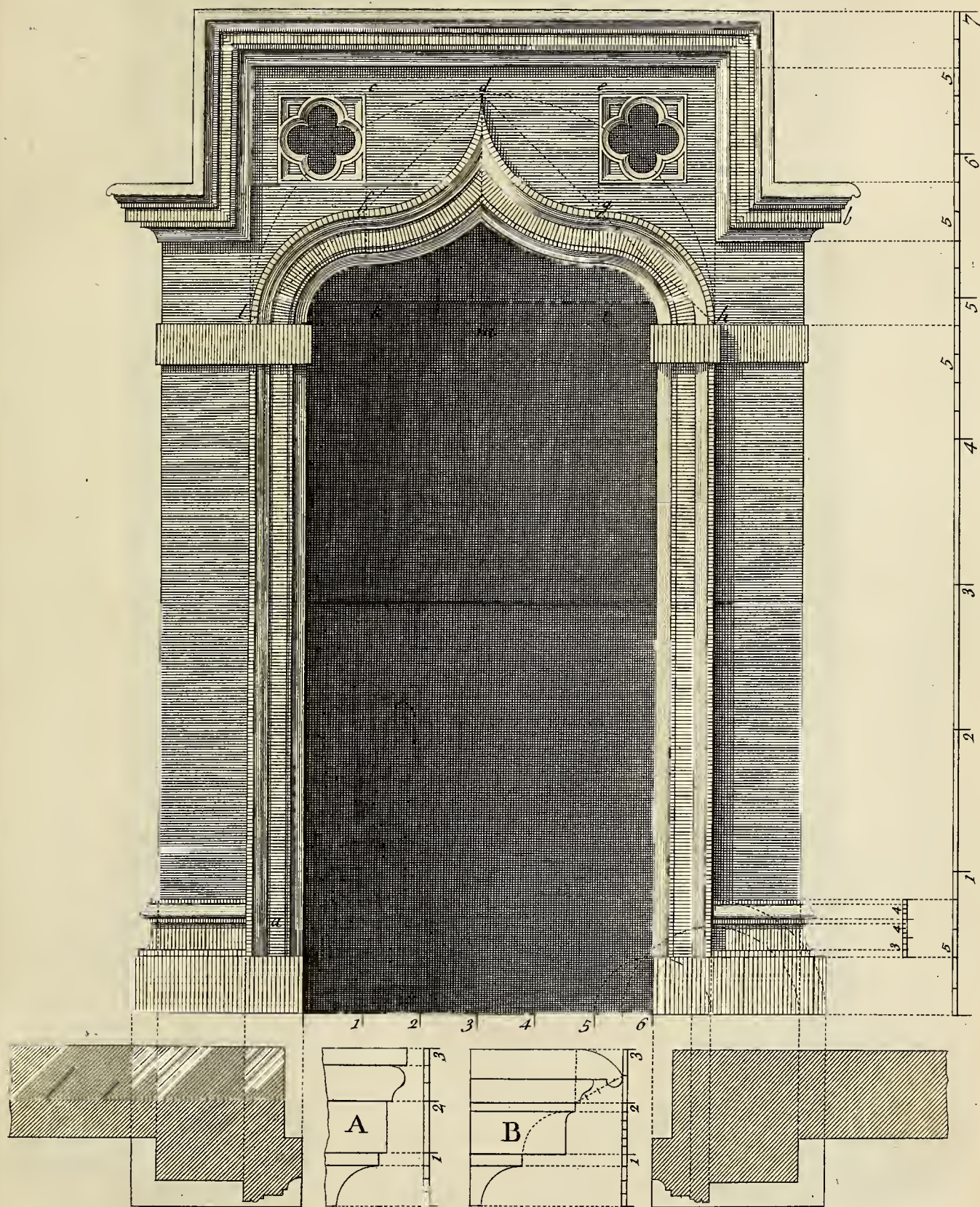


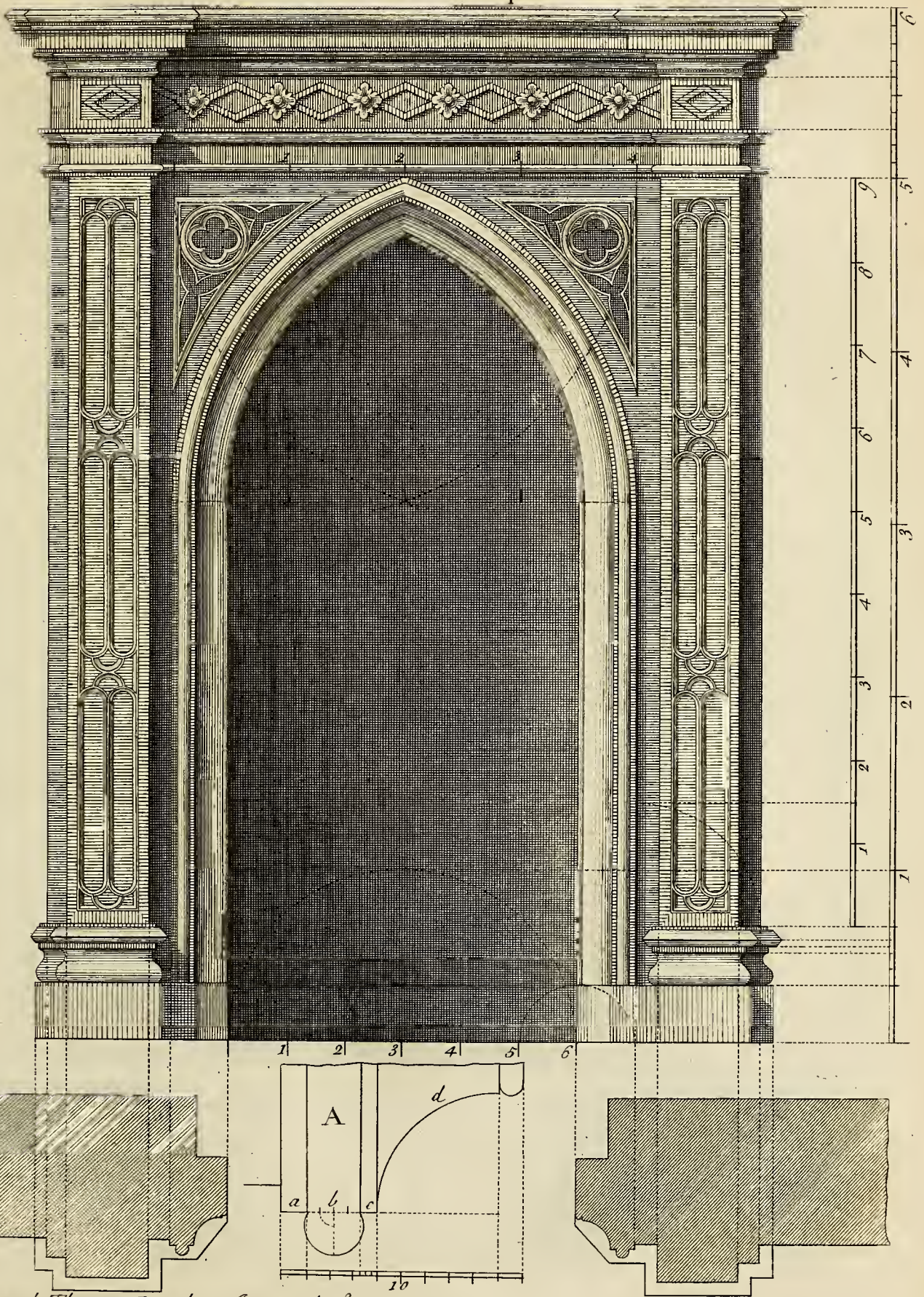


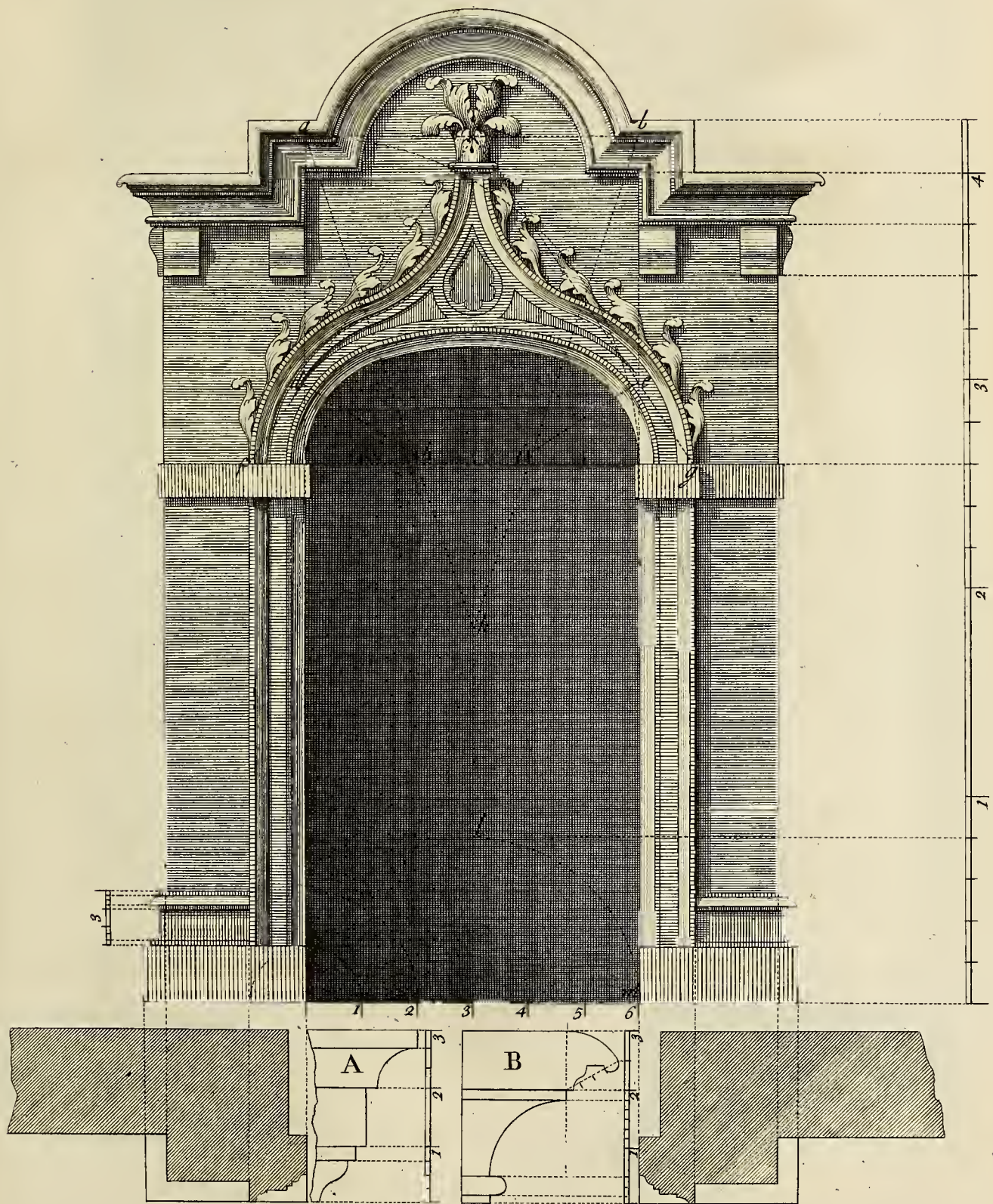


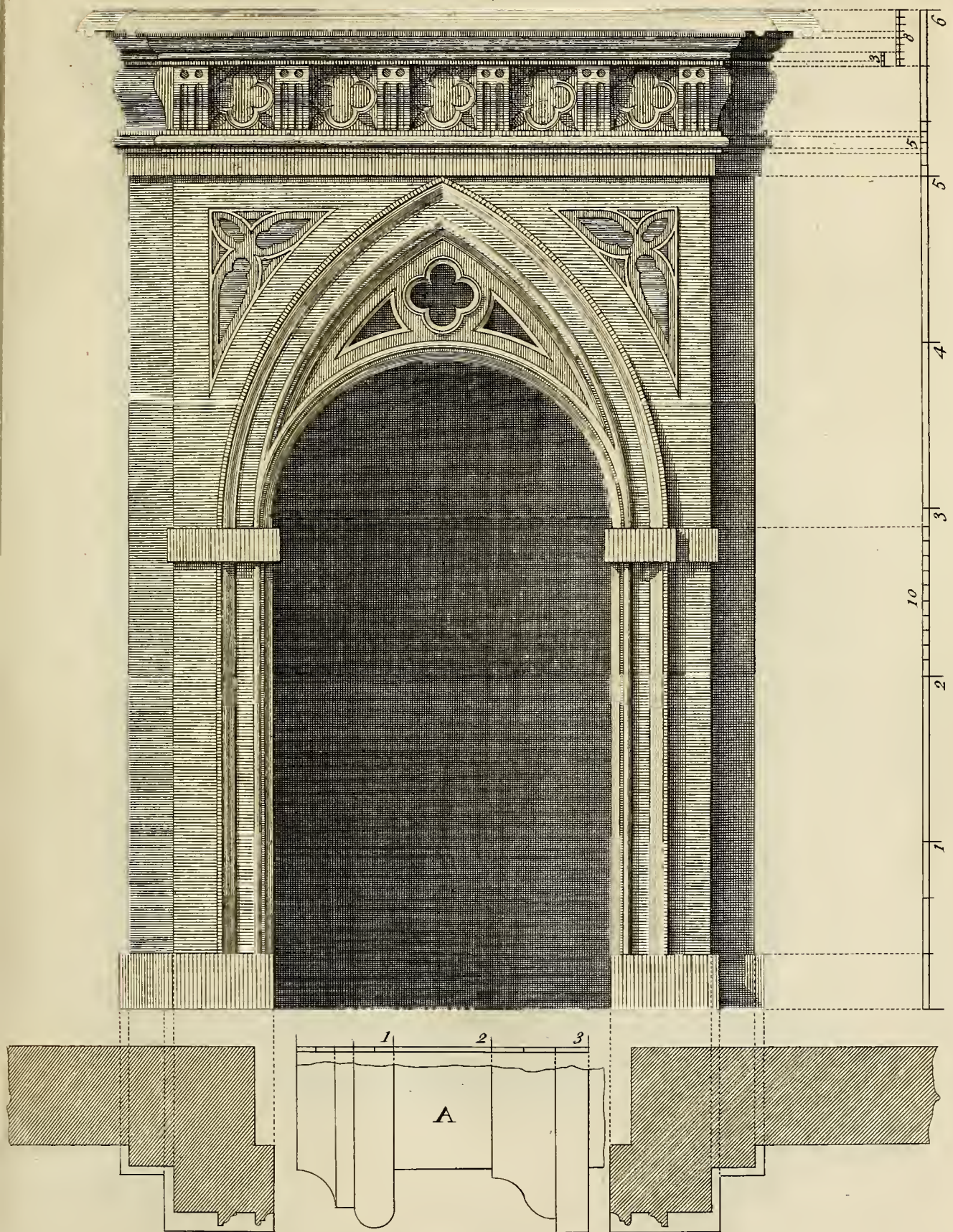


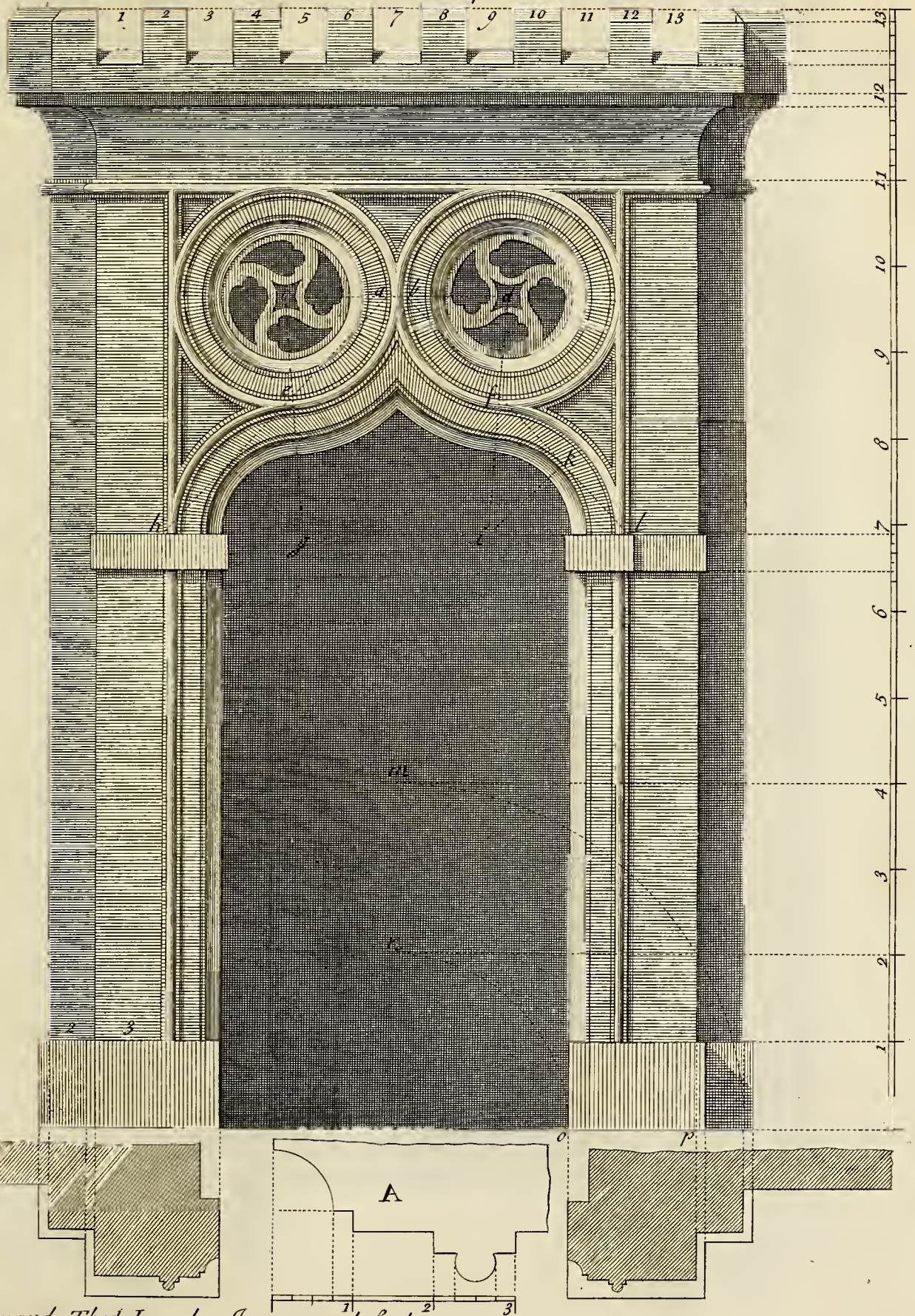


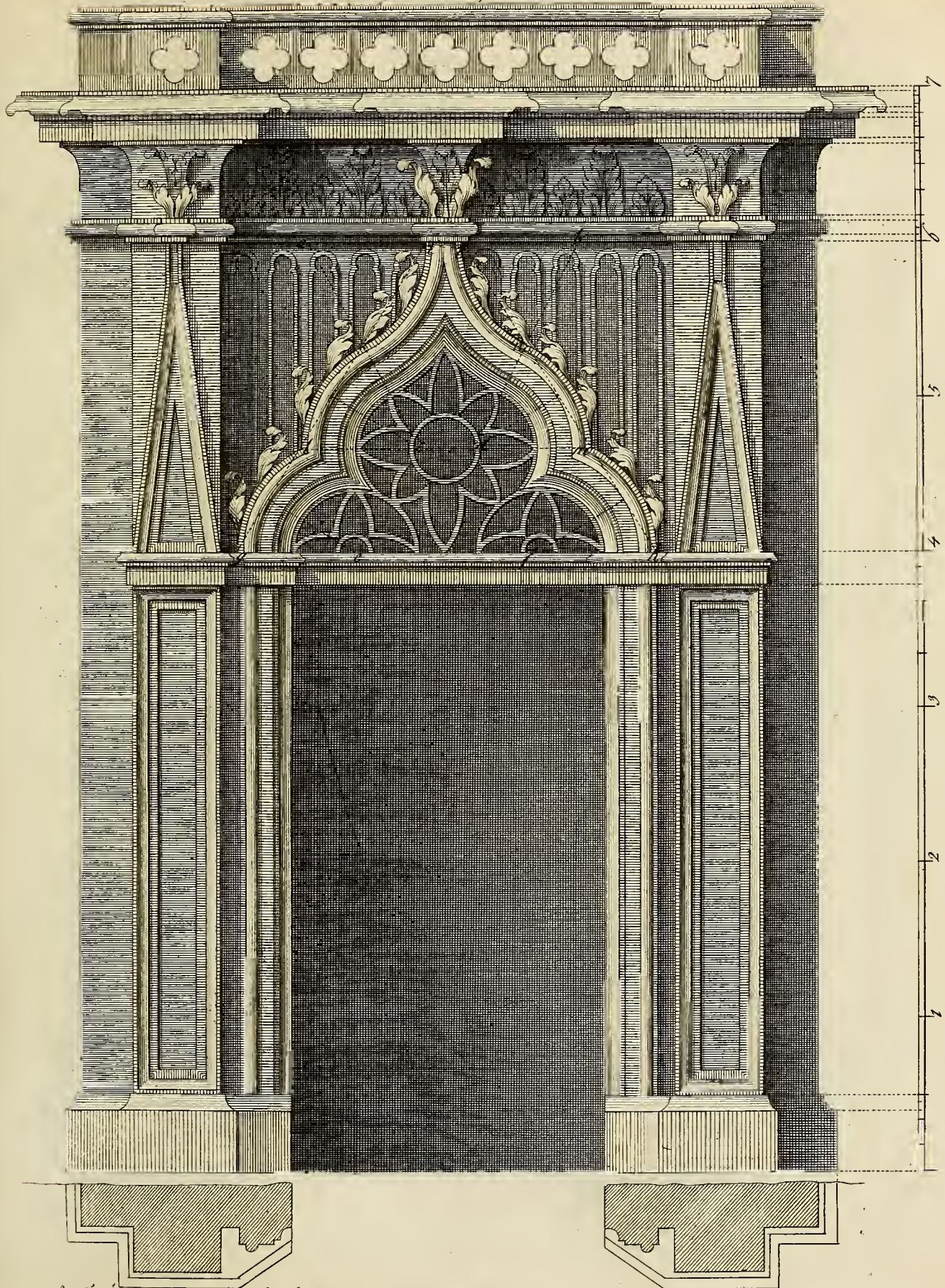






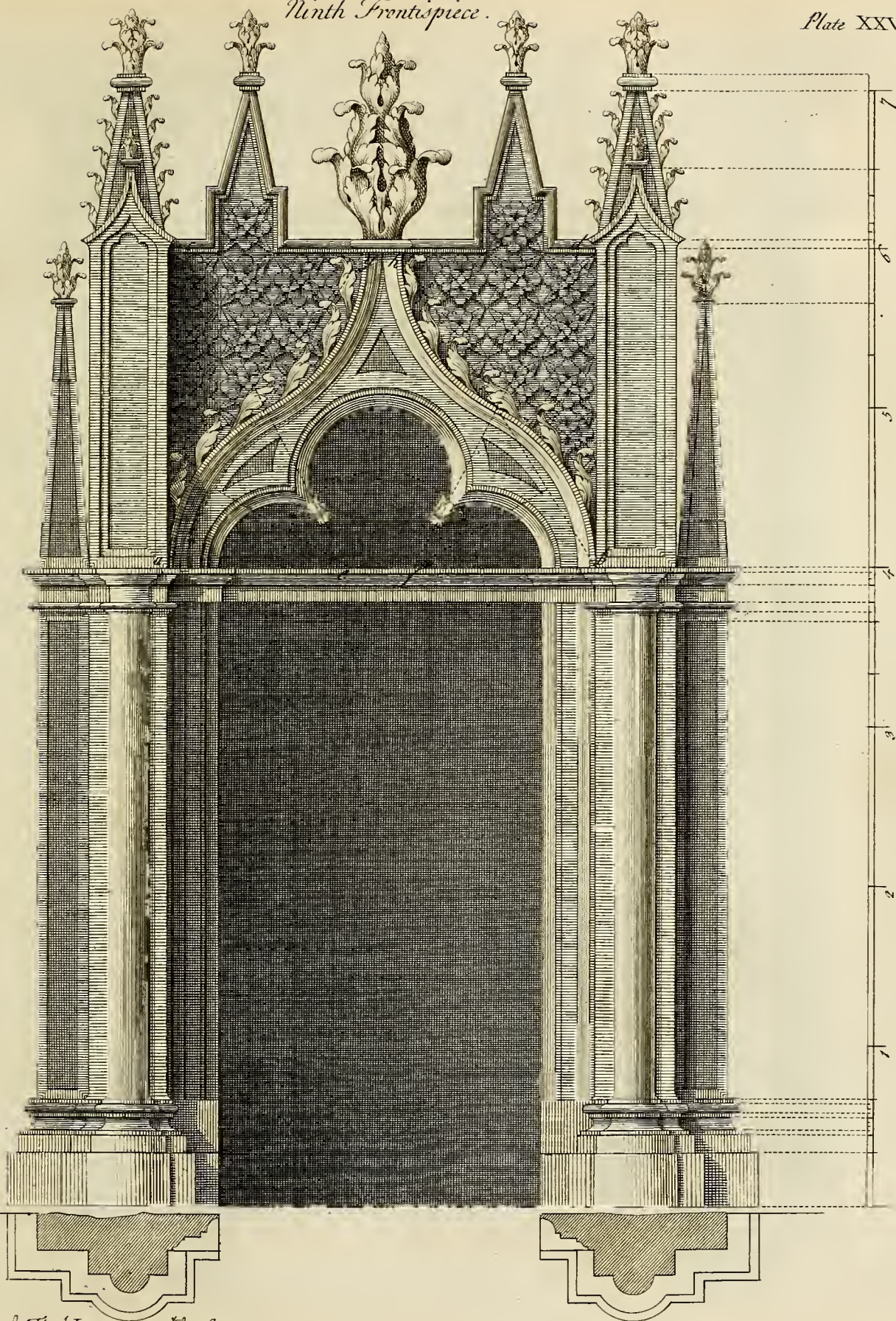


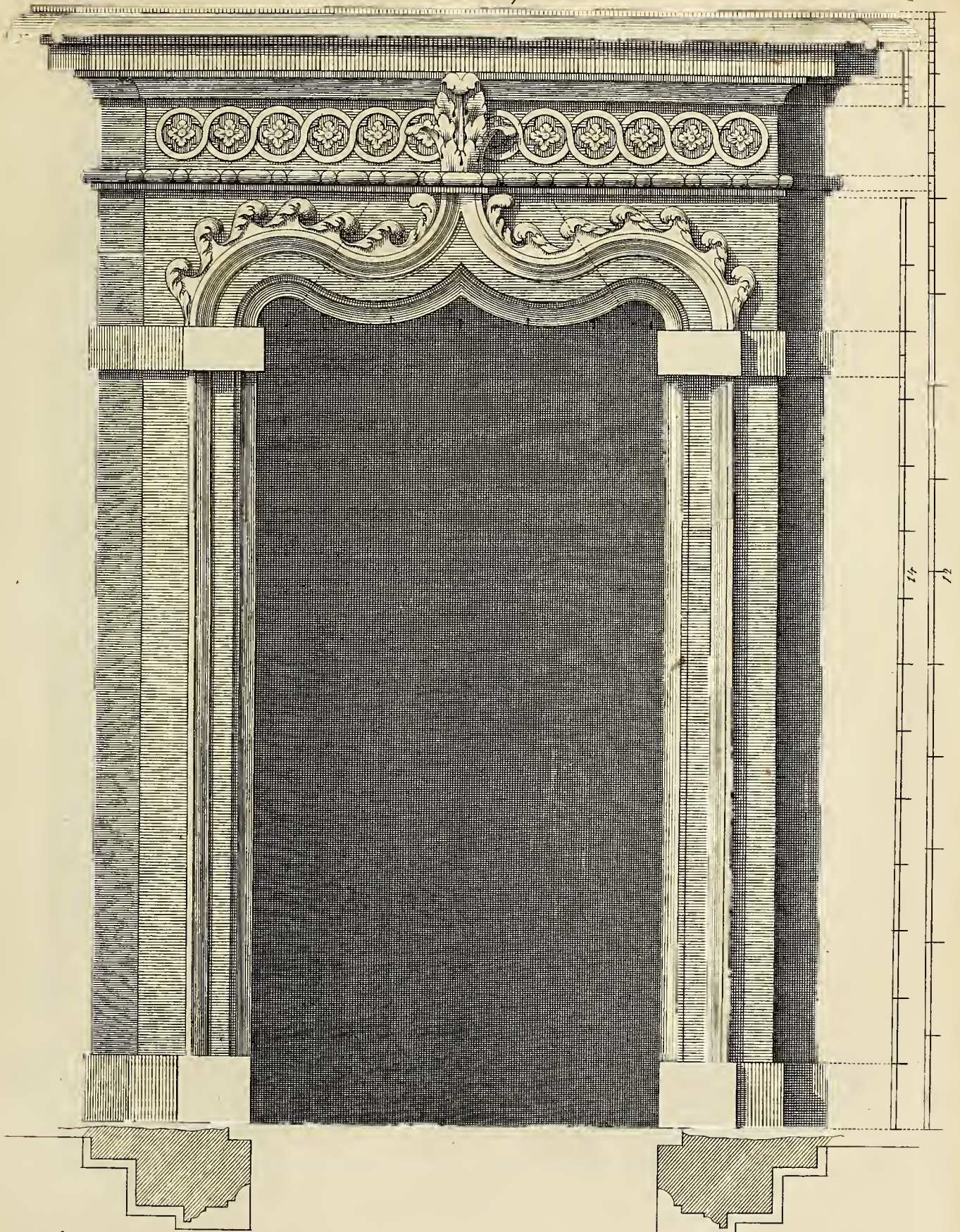


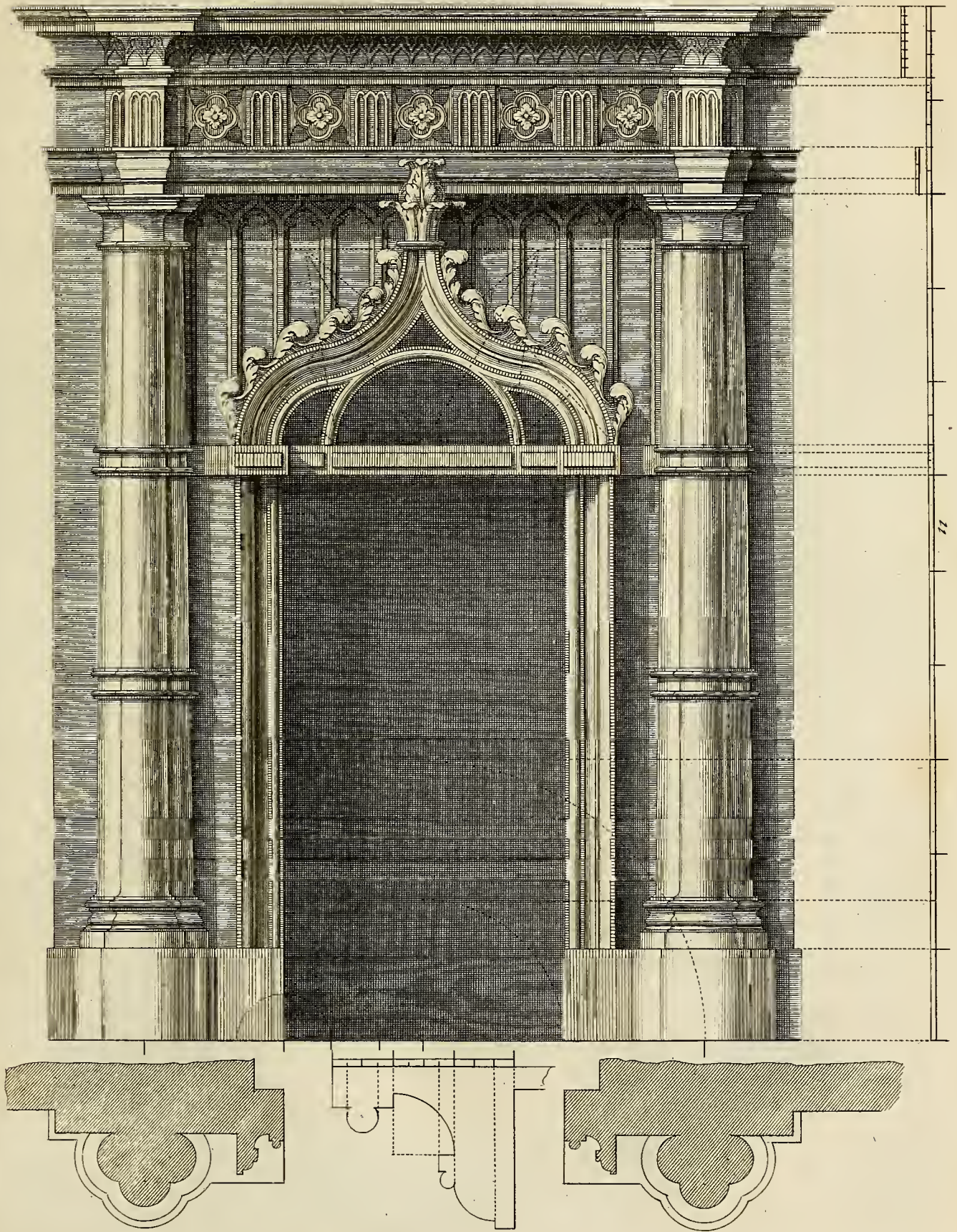


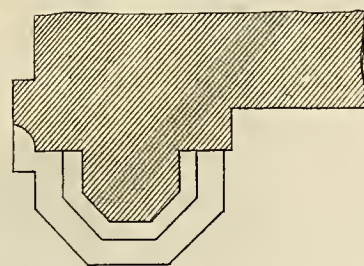
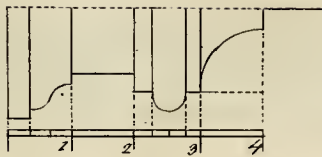
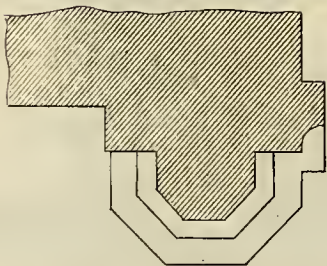
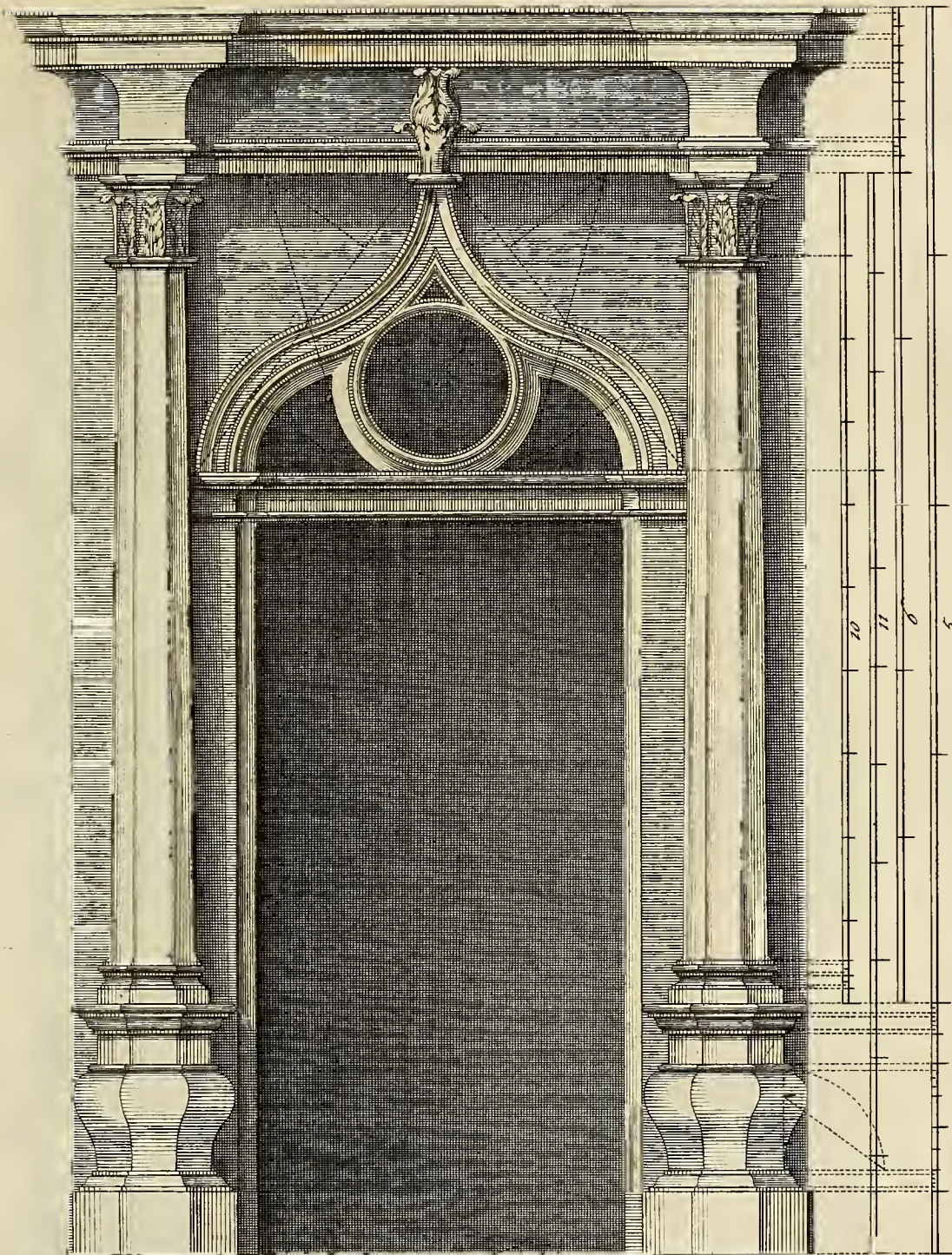
Ninth Frontispiece.

Plate XXV

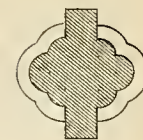
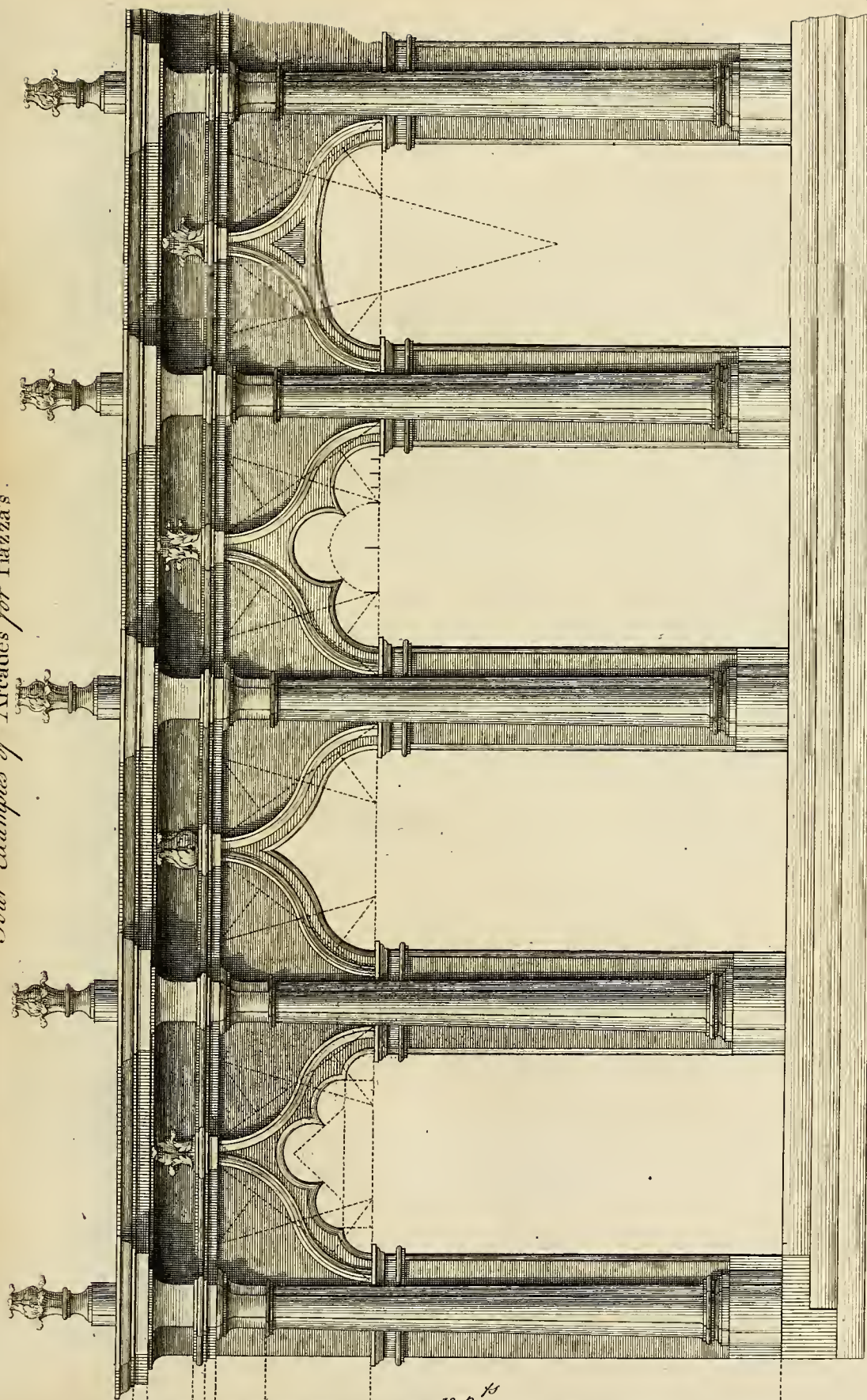




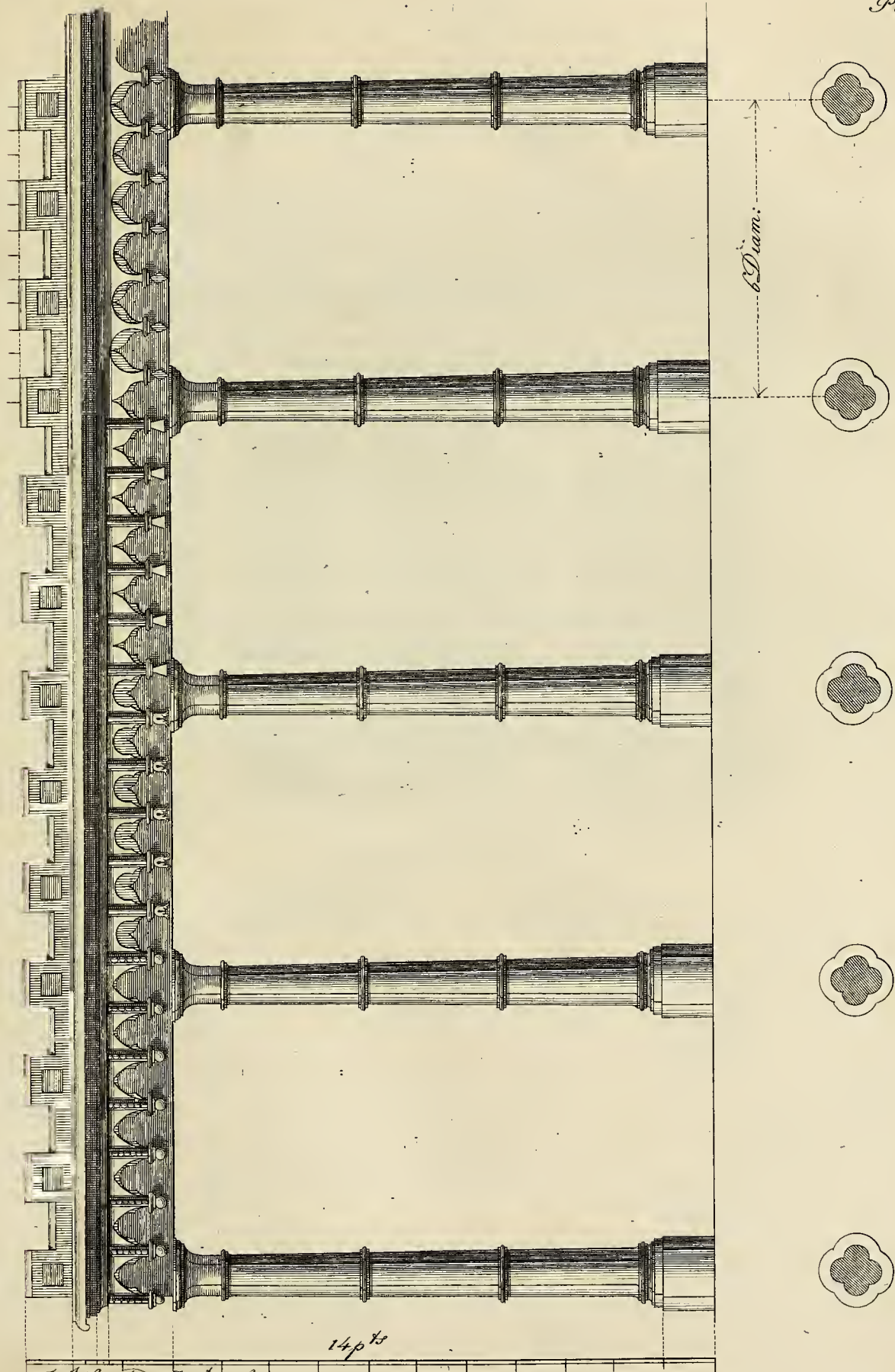




Four Examples of Arcades for Panza's.

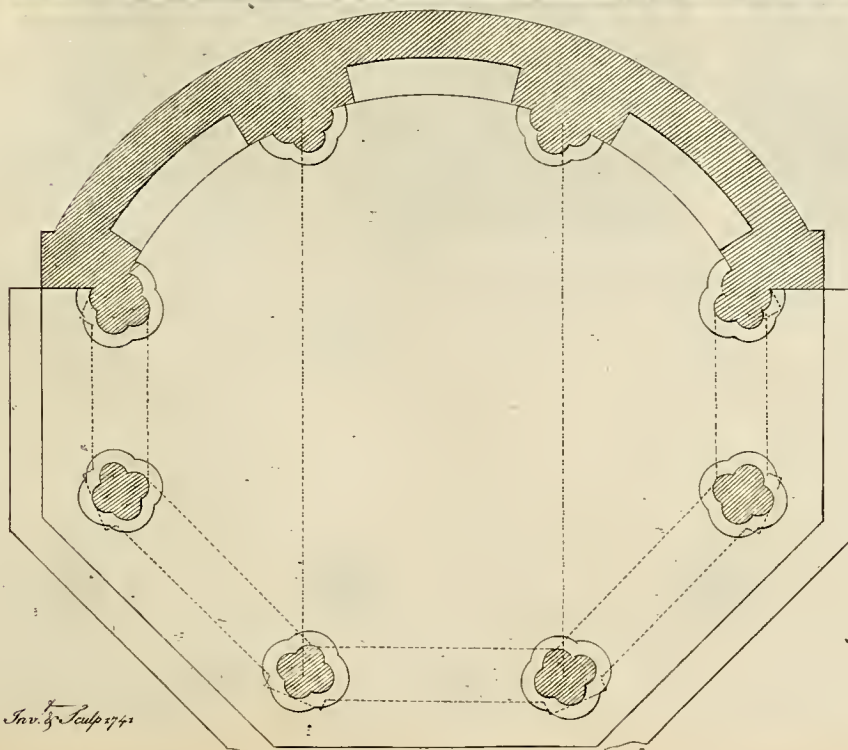
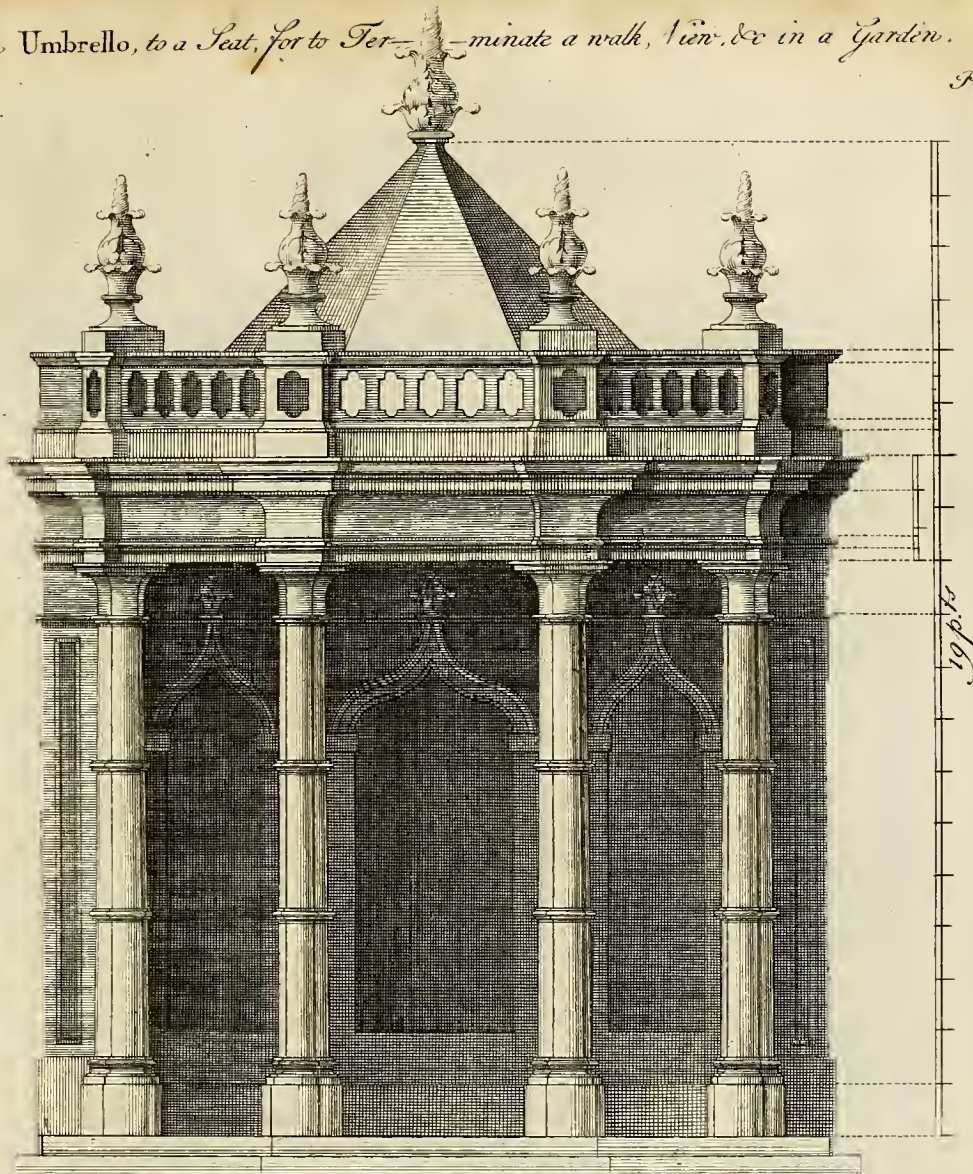


A Gothic Colnade



An Umbrello, to a Seat, for to Terminate a walk, View, &c in a Garden.

Plate XXXI.

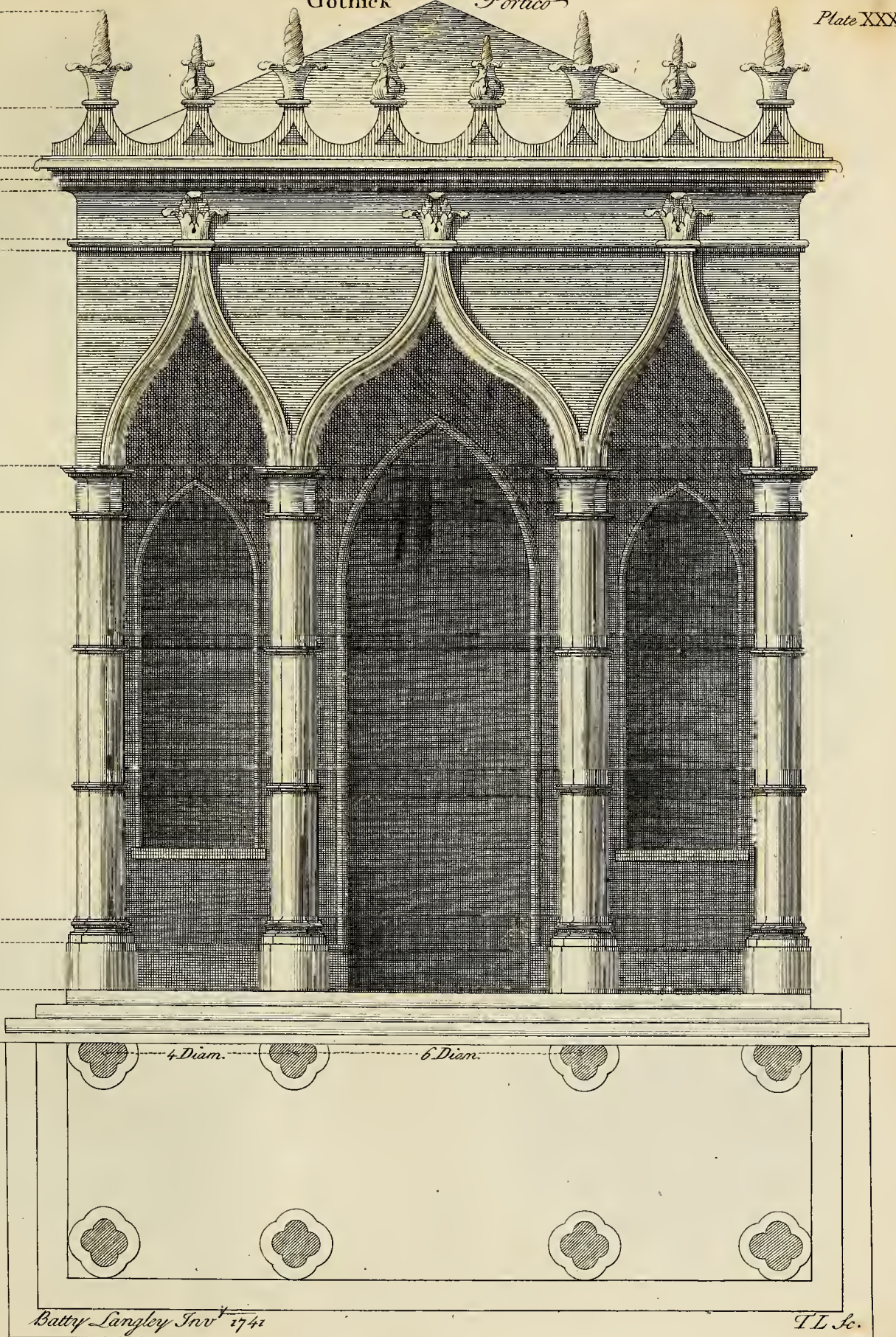


Gothick

Portico

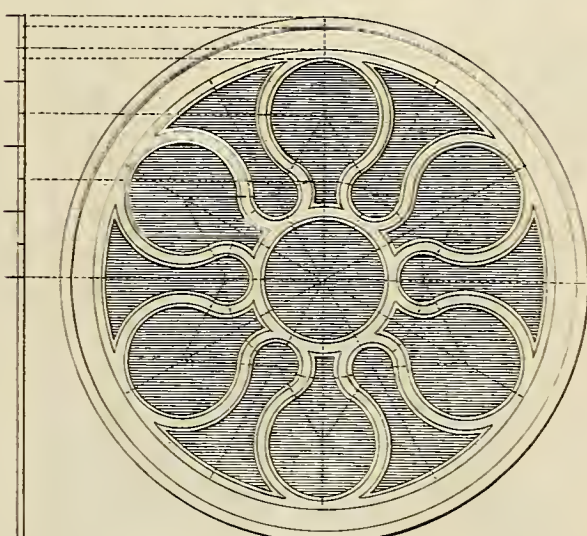
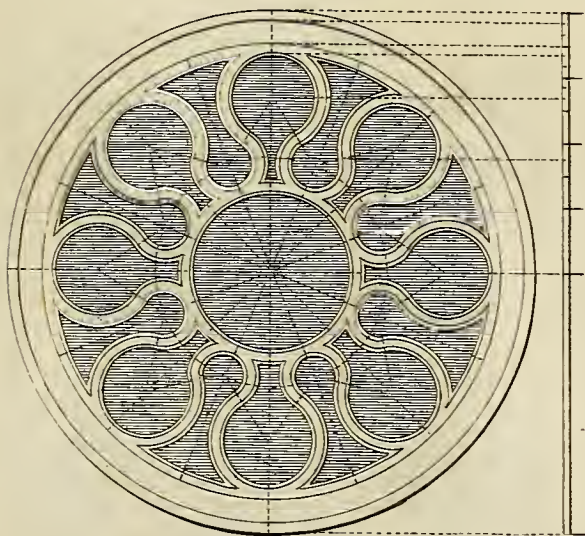
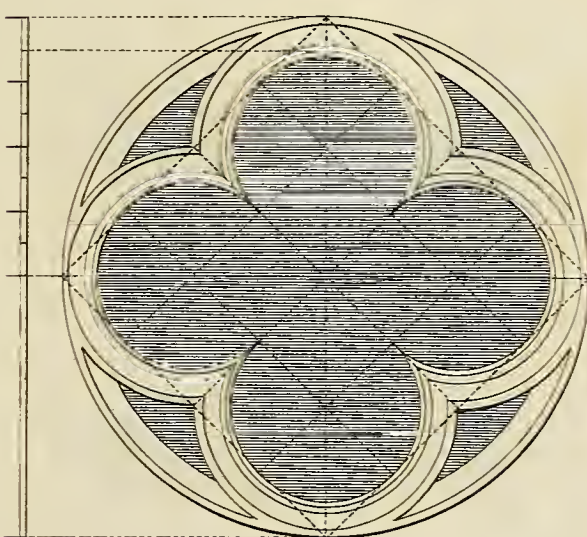
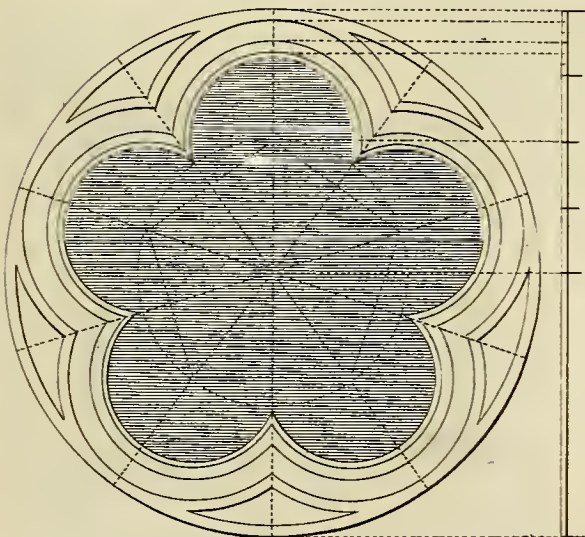
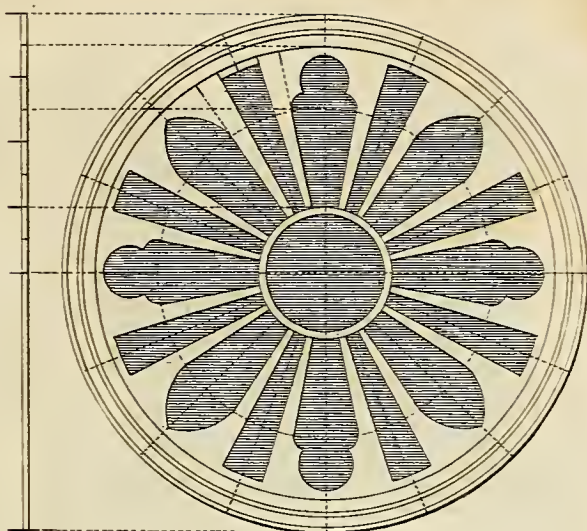
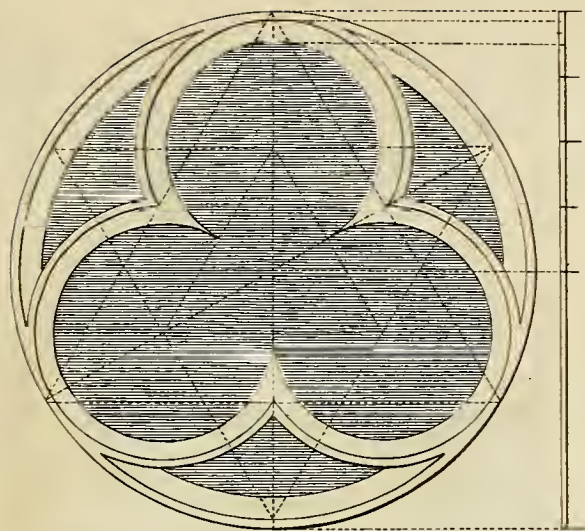
Plate XXXII

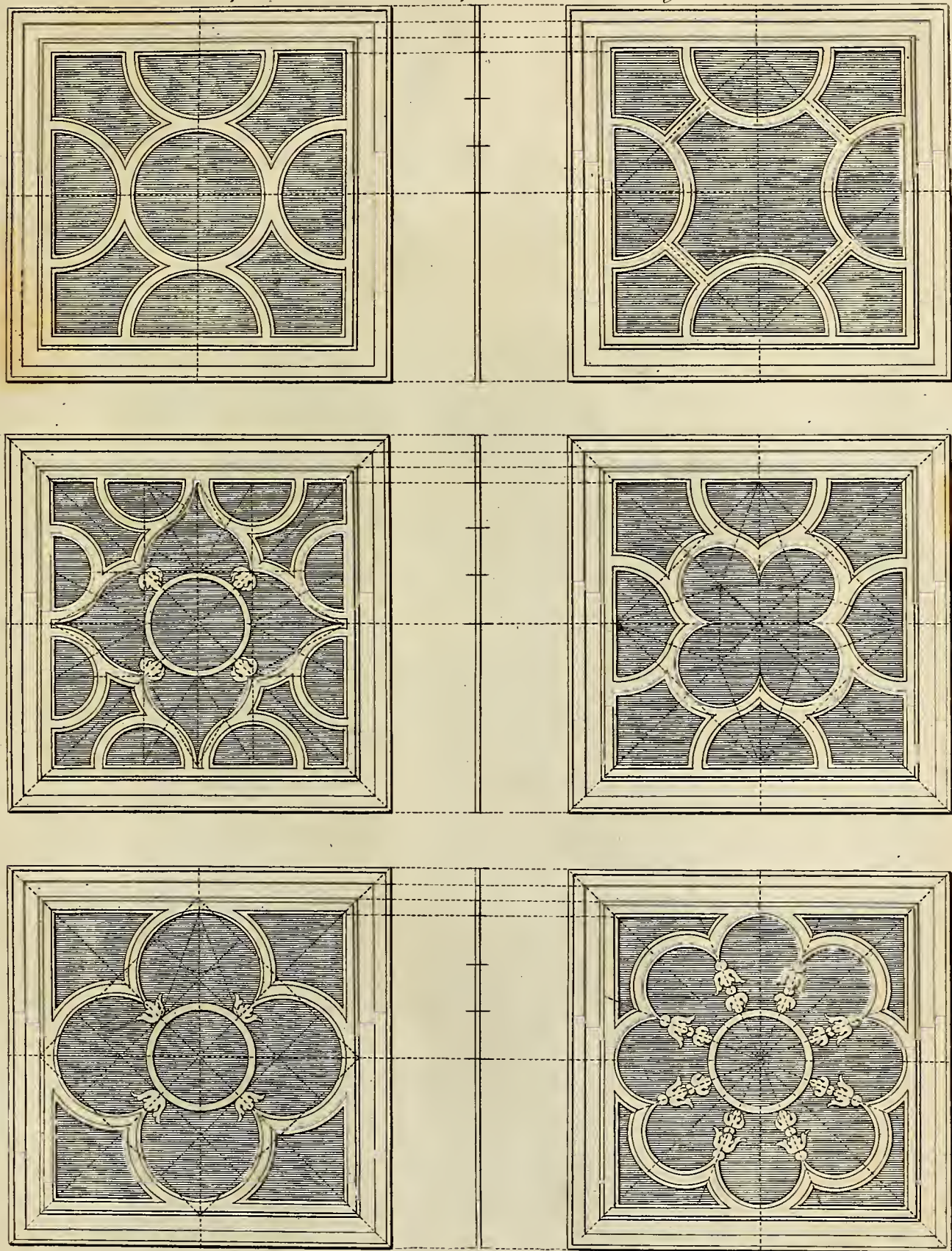
20 Diam. $8\frac{1}{2}$

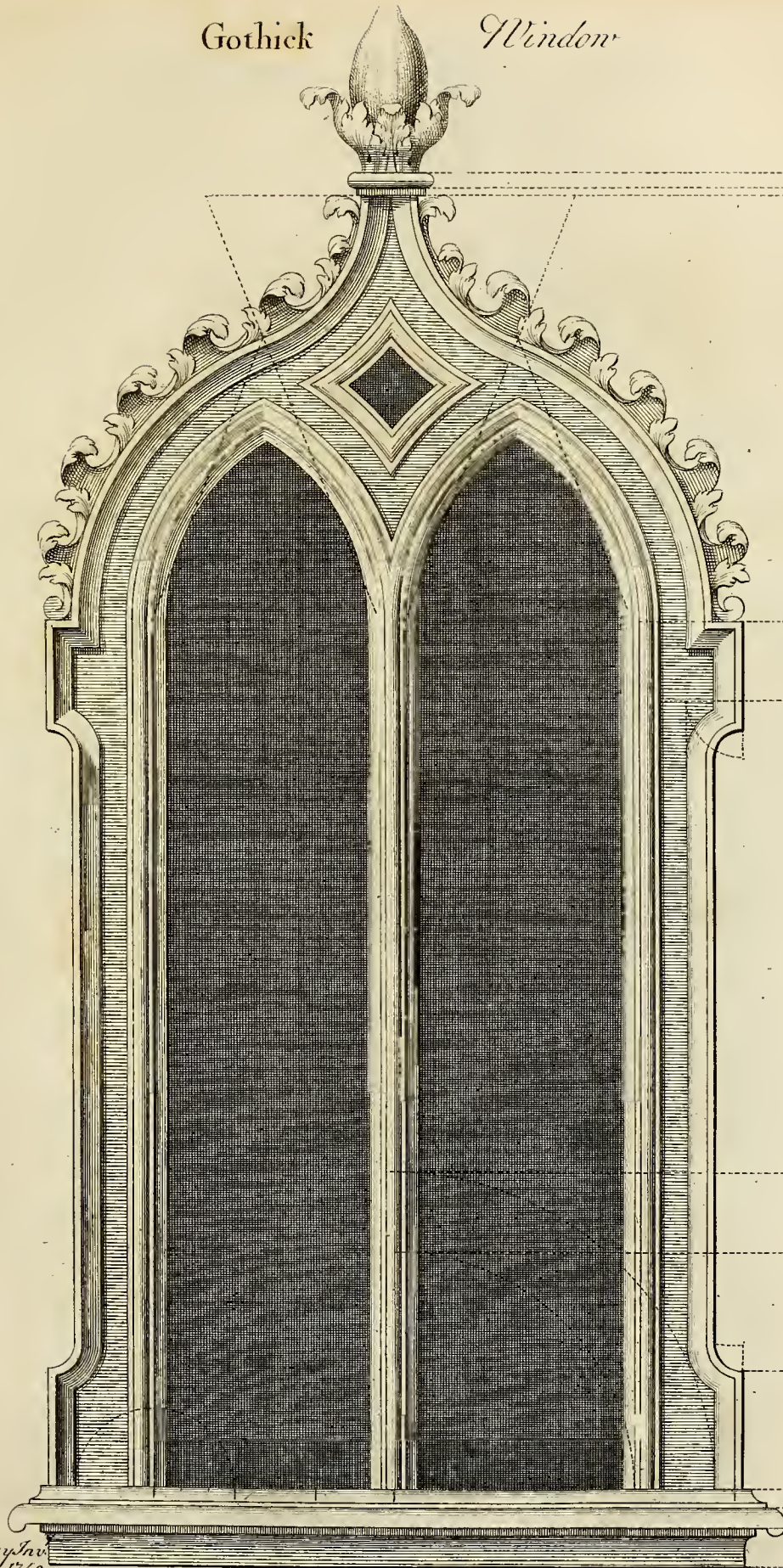


Battry Langley Inv^d 1741

T.L. Sc.







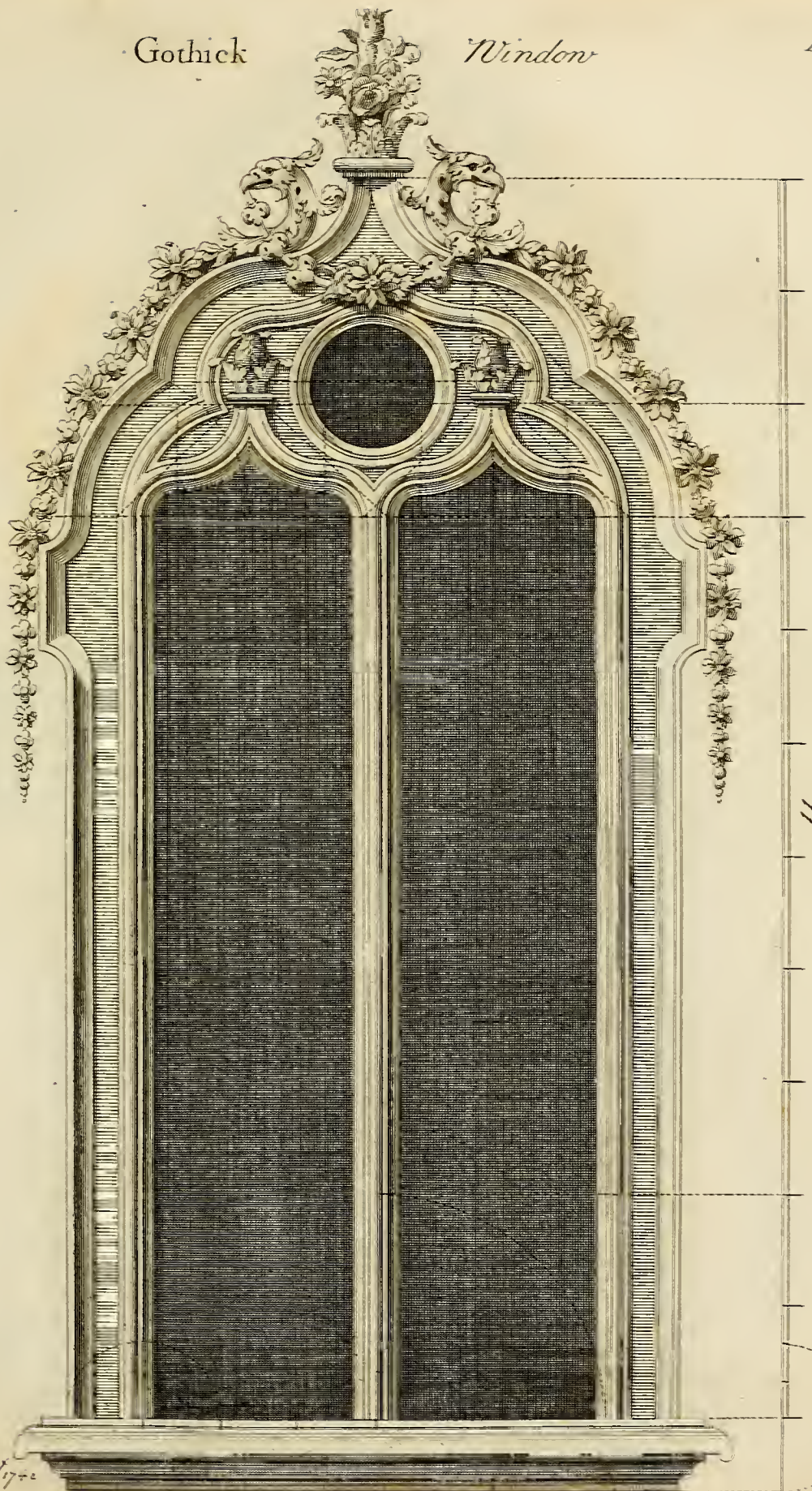
19 p. ft.

TL Sc

Gothick

Window

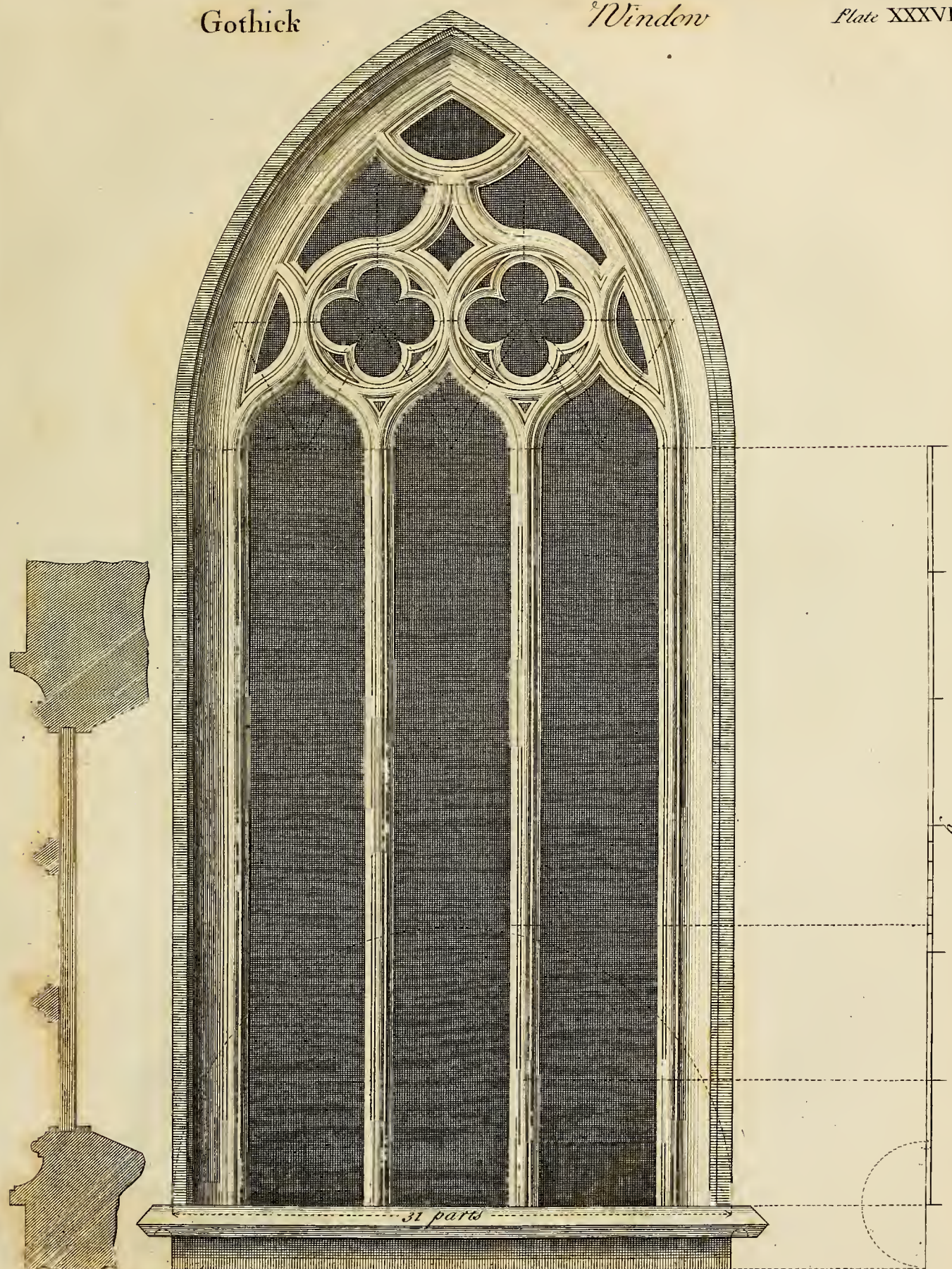
Plate XXXVI

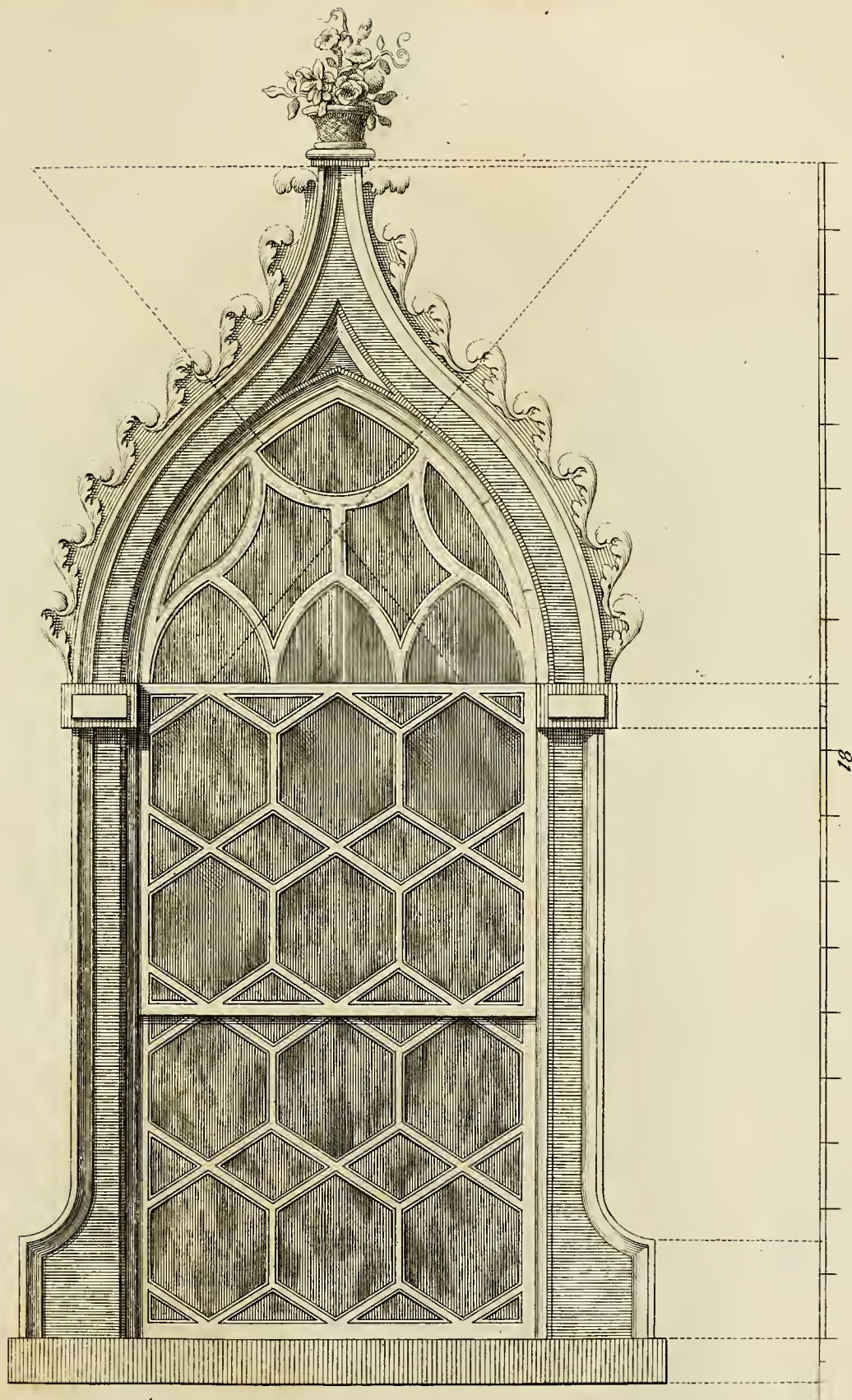


Gothick

Window

Plate XXXVII

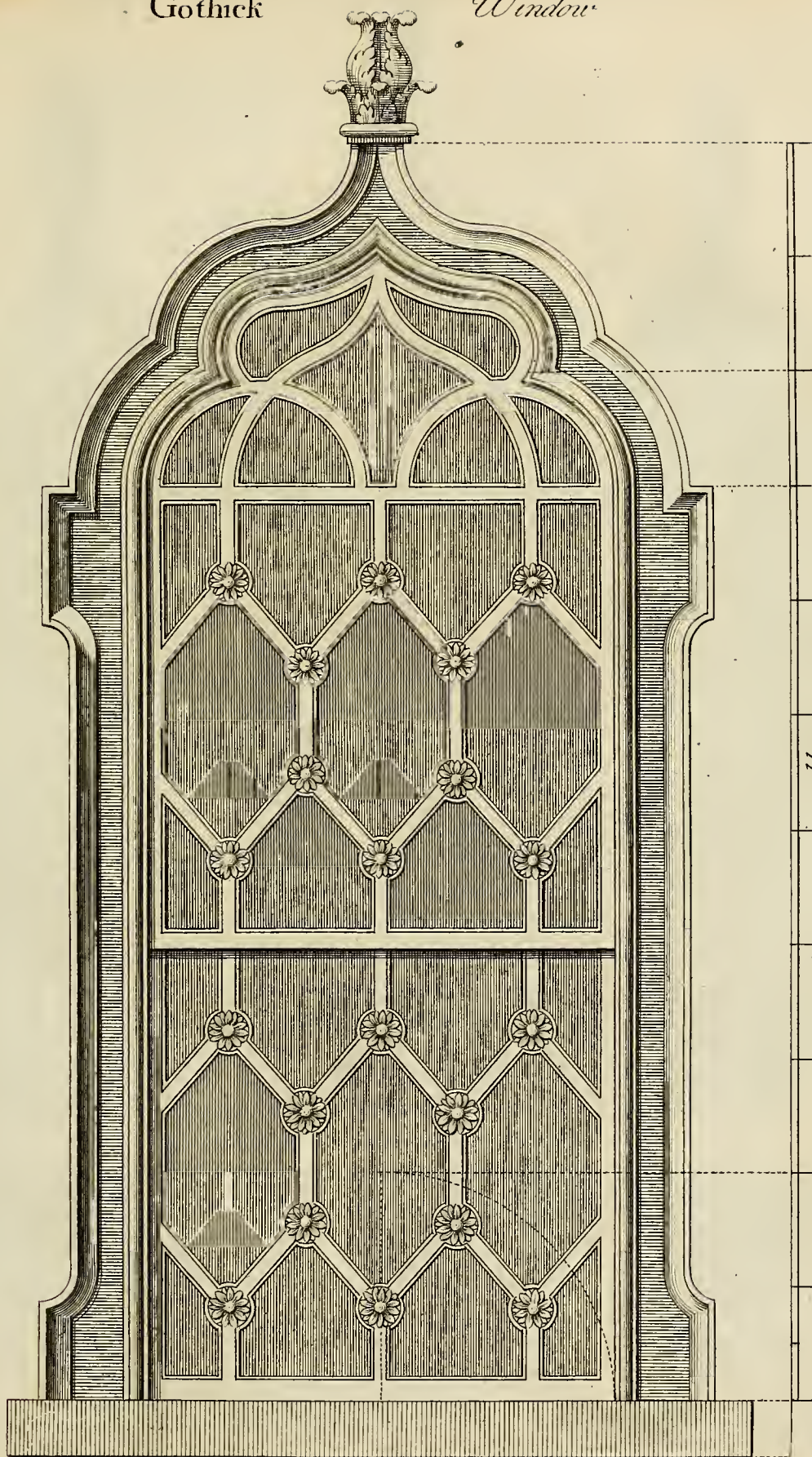




Gothick

Window

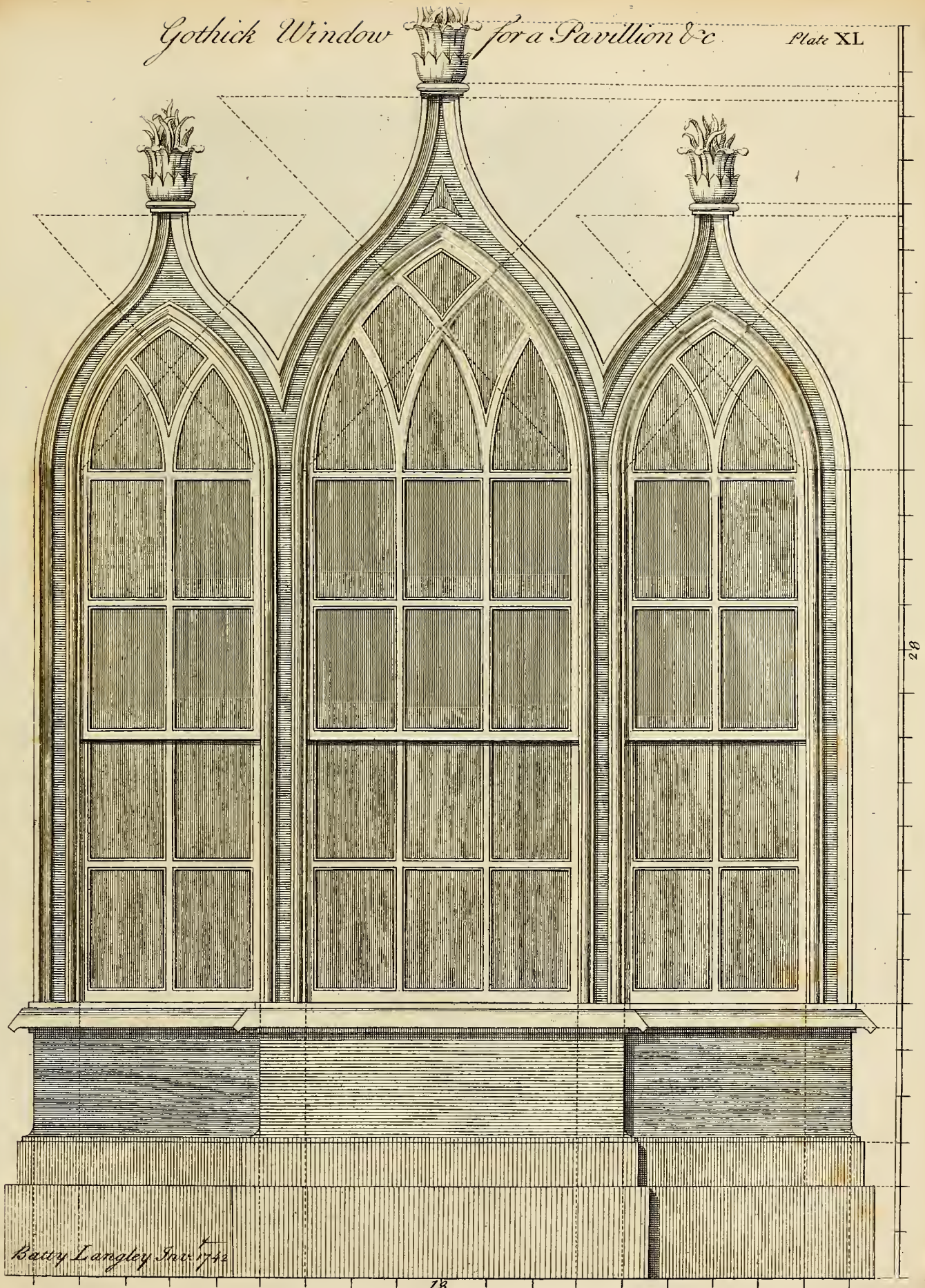
Plate XXXIX



Batty Langley Inv. 1742

Gothick Window for a Pavillion &c

Plate XL

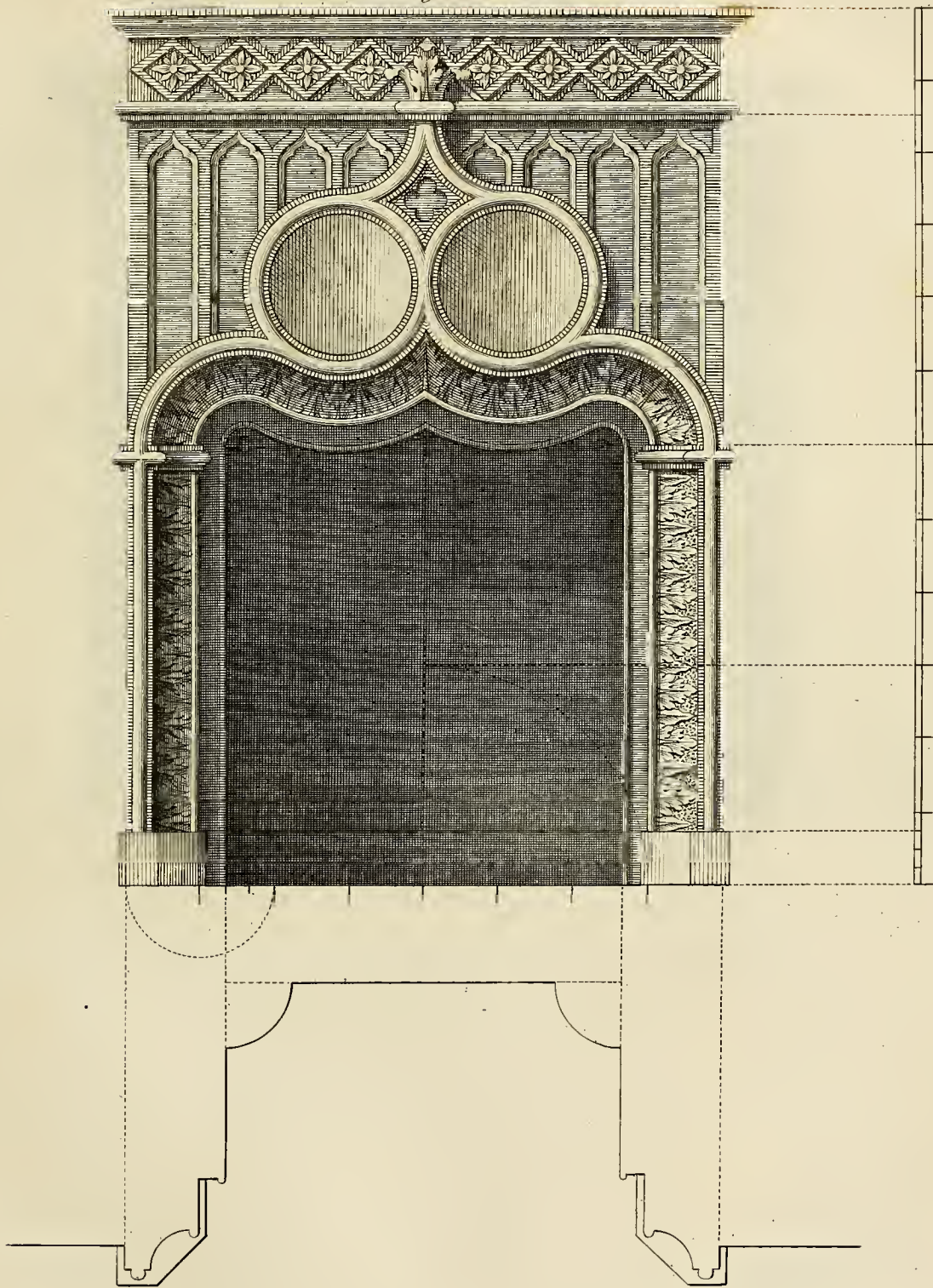


28

Betty Langley Inv. 1742

Chimney Piece

Plate XLI

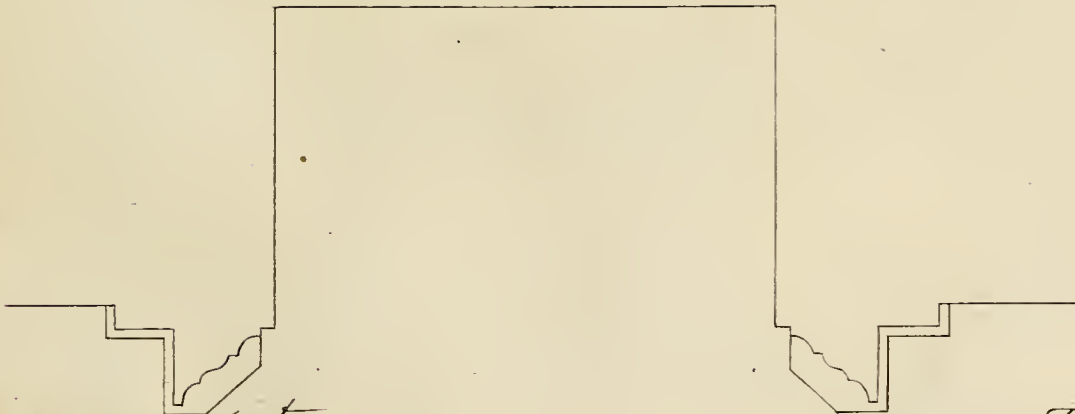
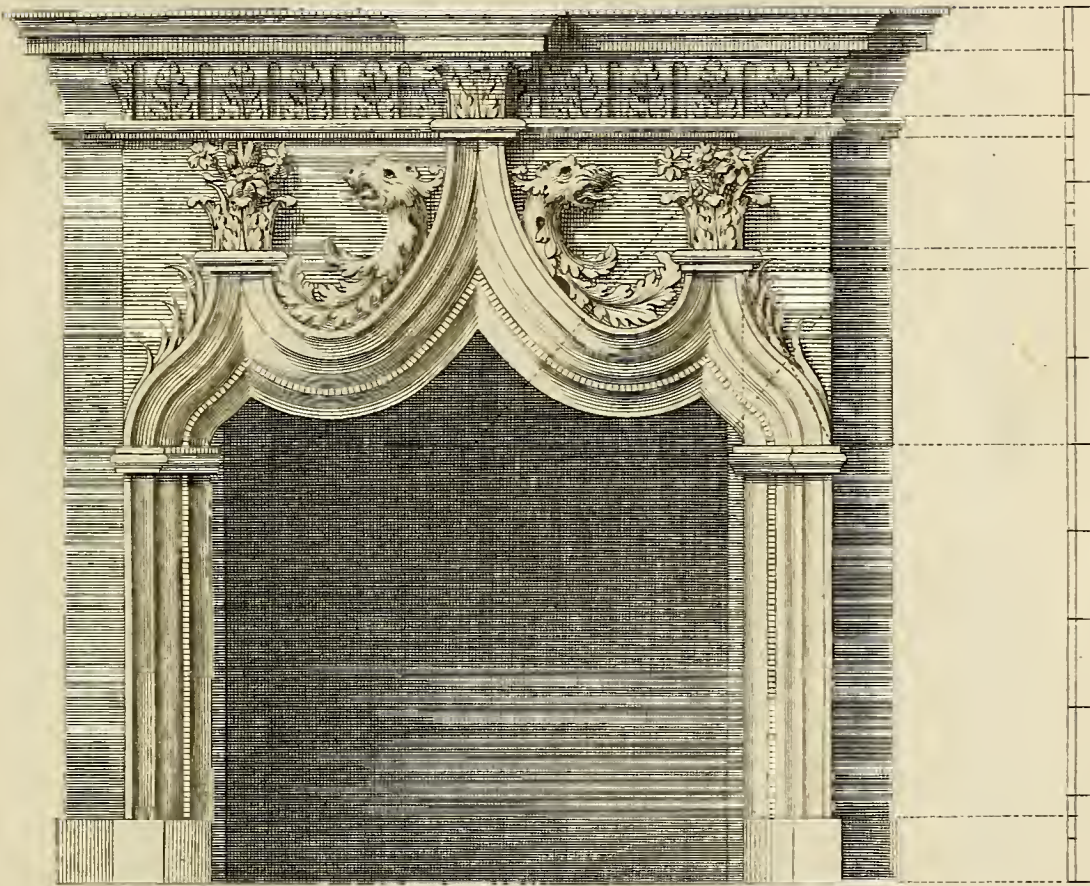


Batty Langley Inv. 1742

T Langley Sc.

Chimney Piece

Plate XLII

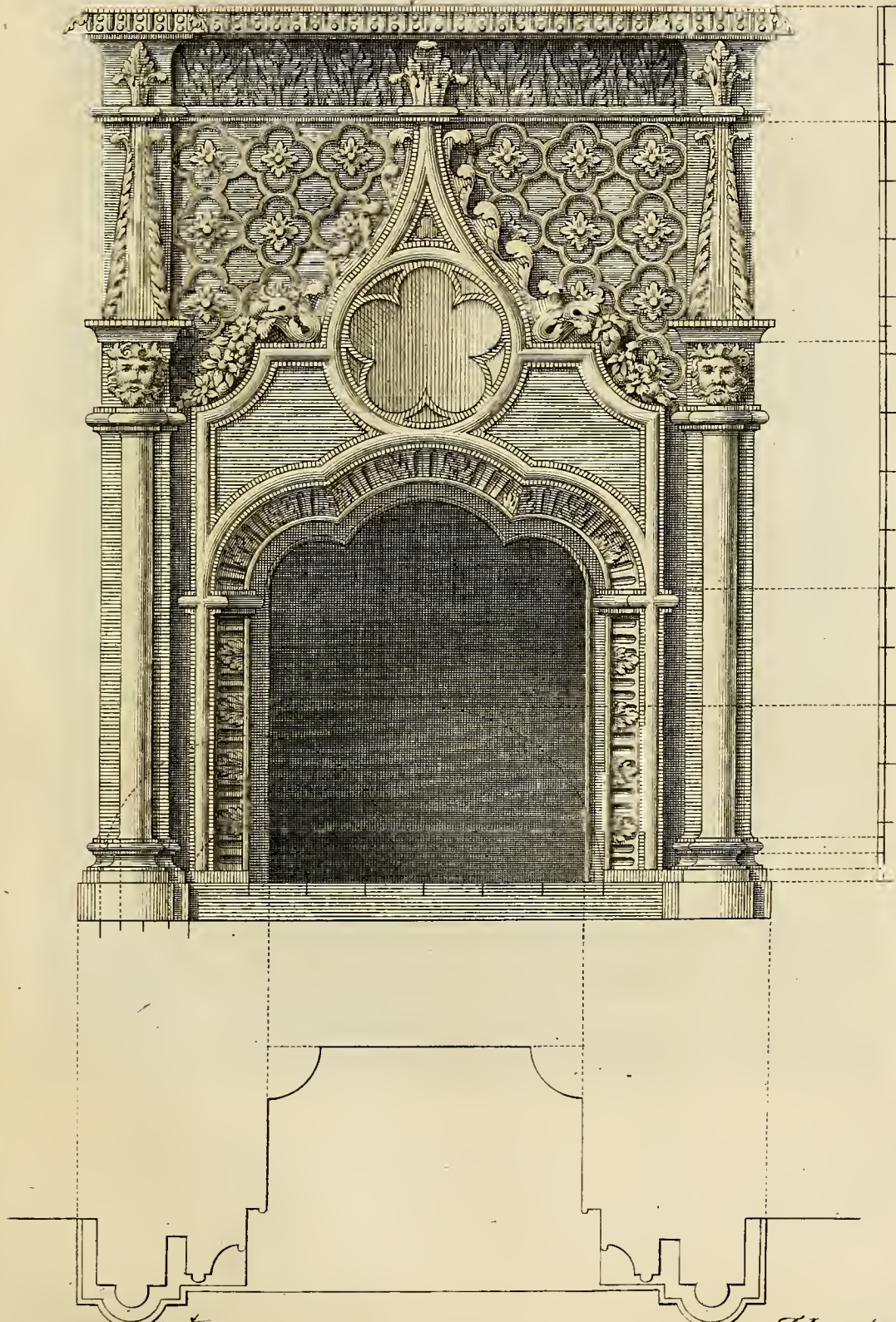


Batty Langley Inv^t 1742

TLS

Chimney Piece

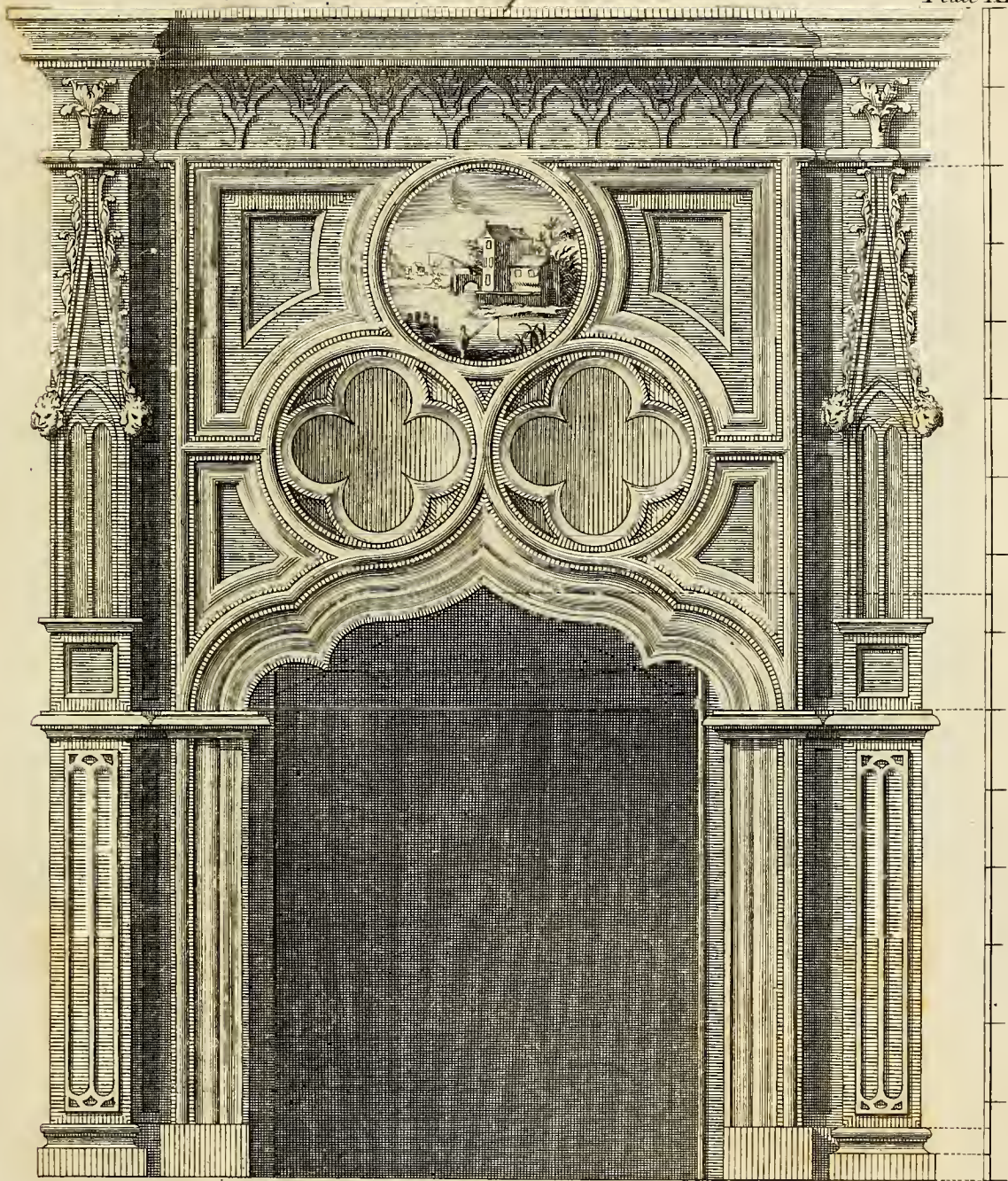
Plate XLIII



Batty Langley Inv. 1742

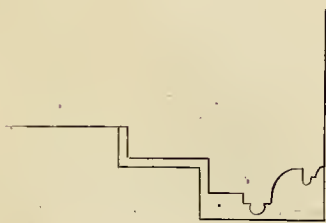
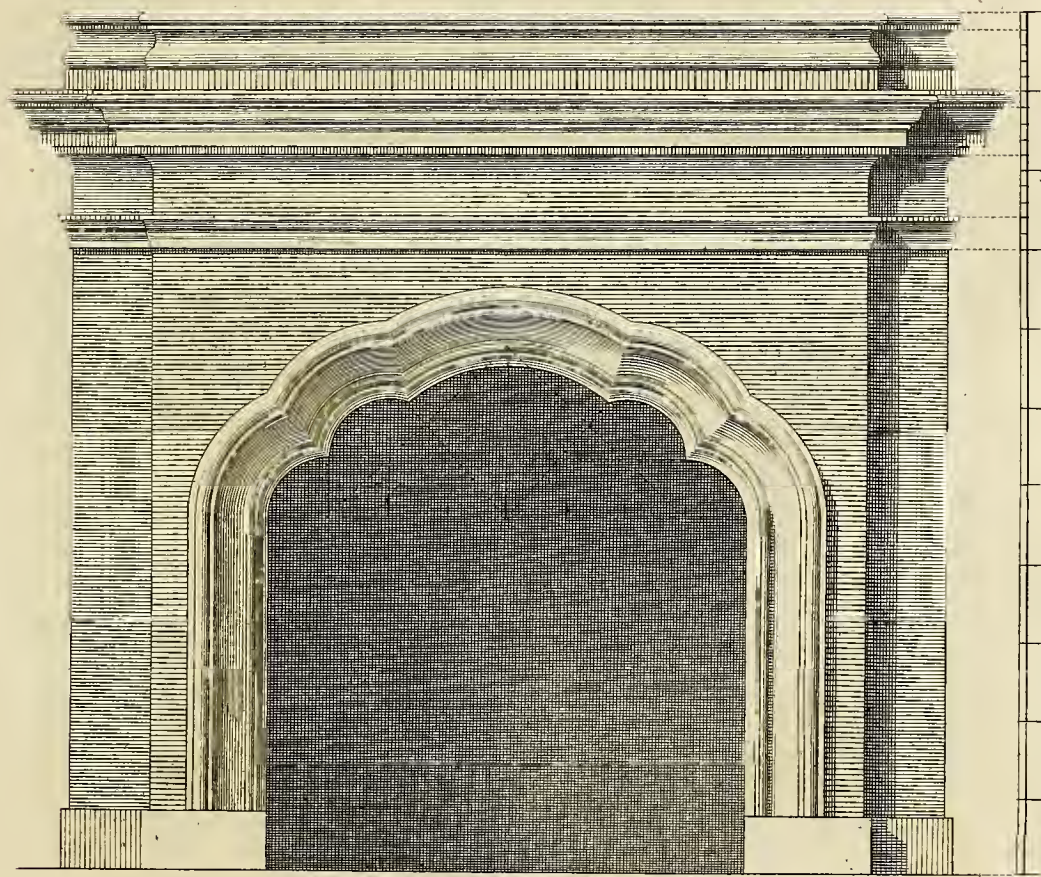
F Langley Sc





Chimney Piece

Plate XLV

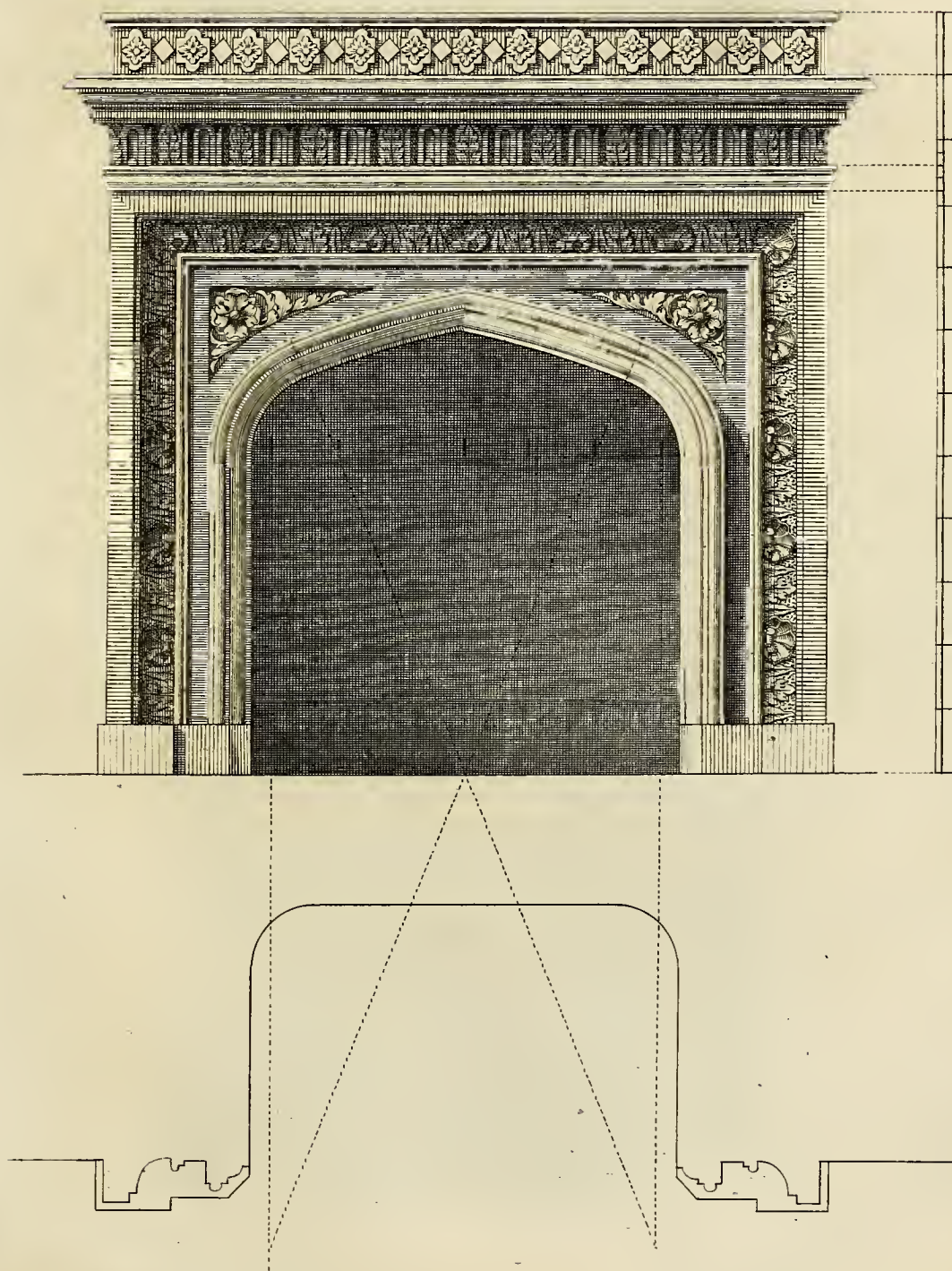


Batty Langley Inv. 1742

T. L. Sculp.

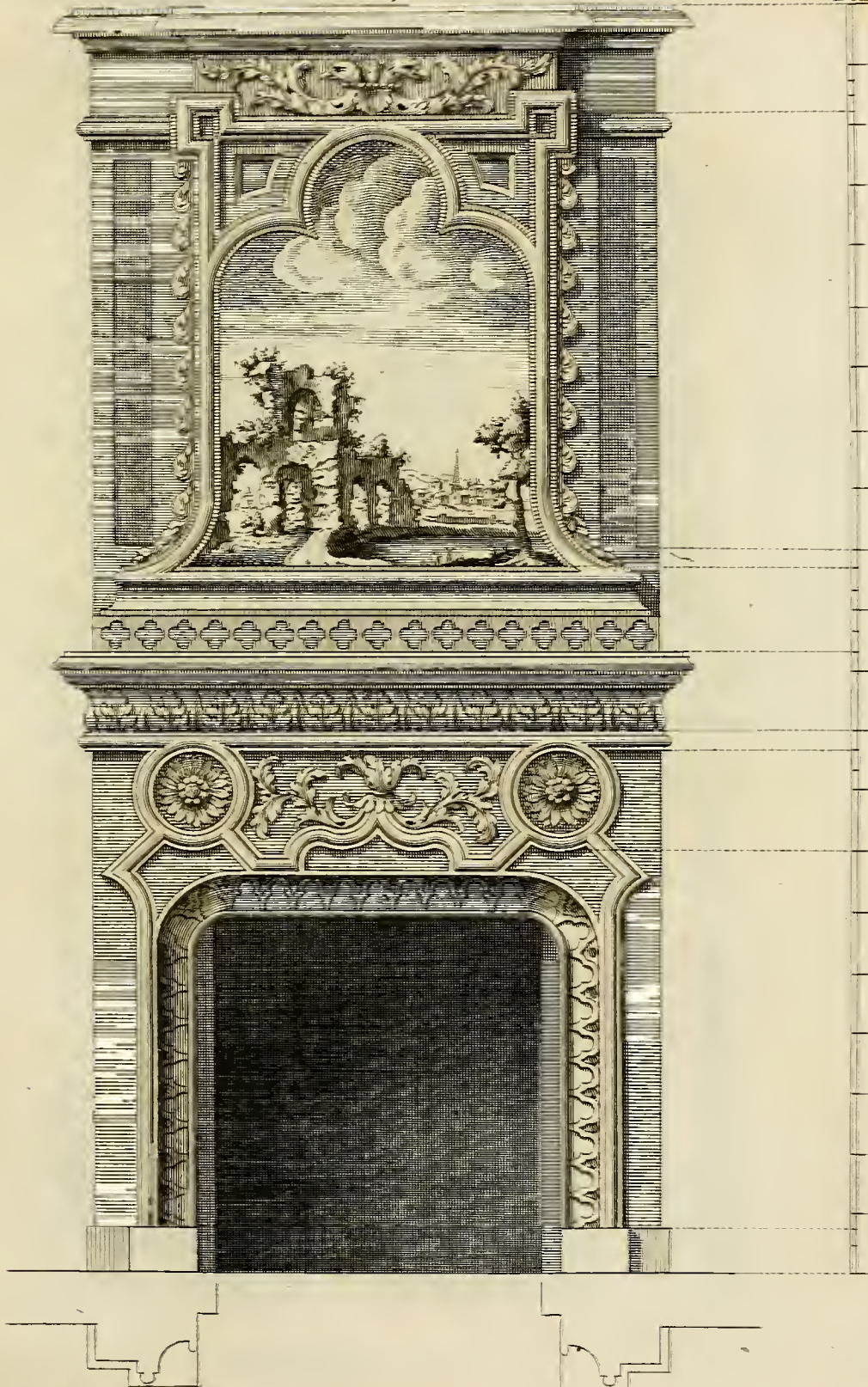
Chimney Piece

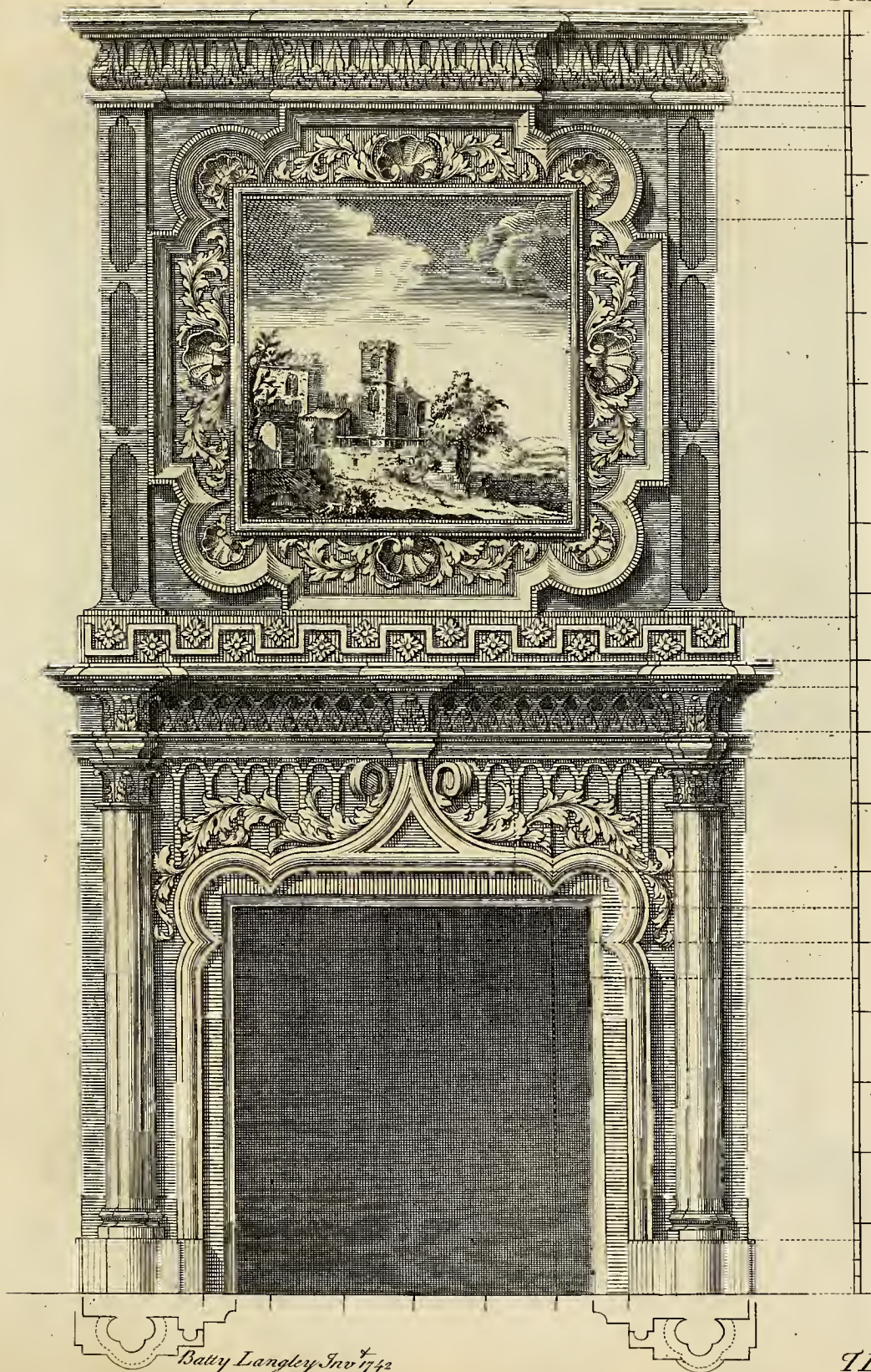
Plate XLVI

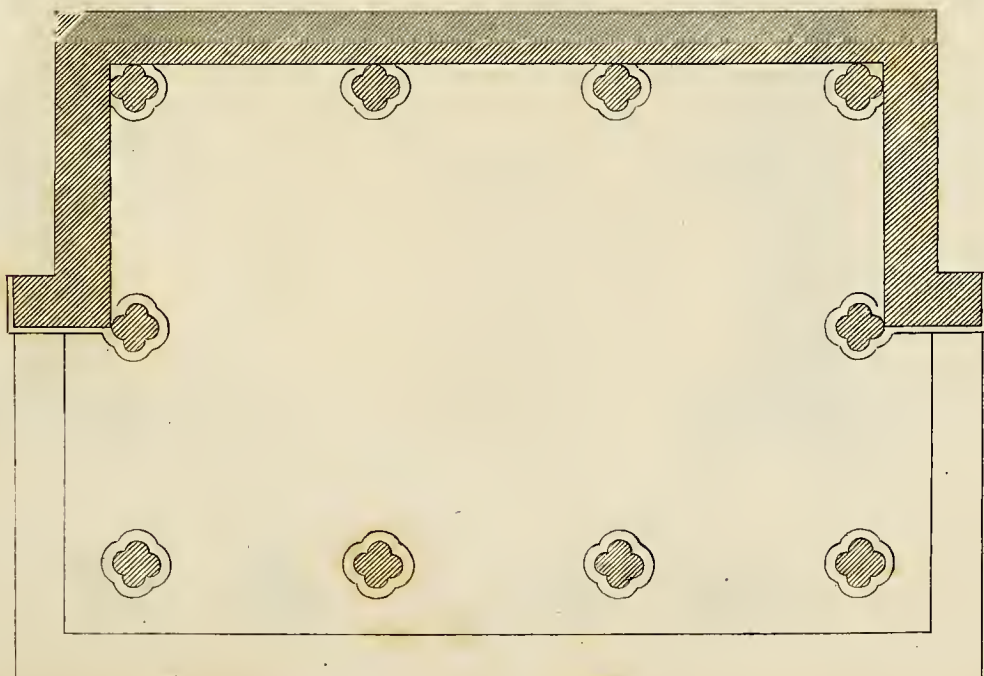
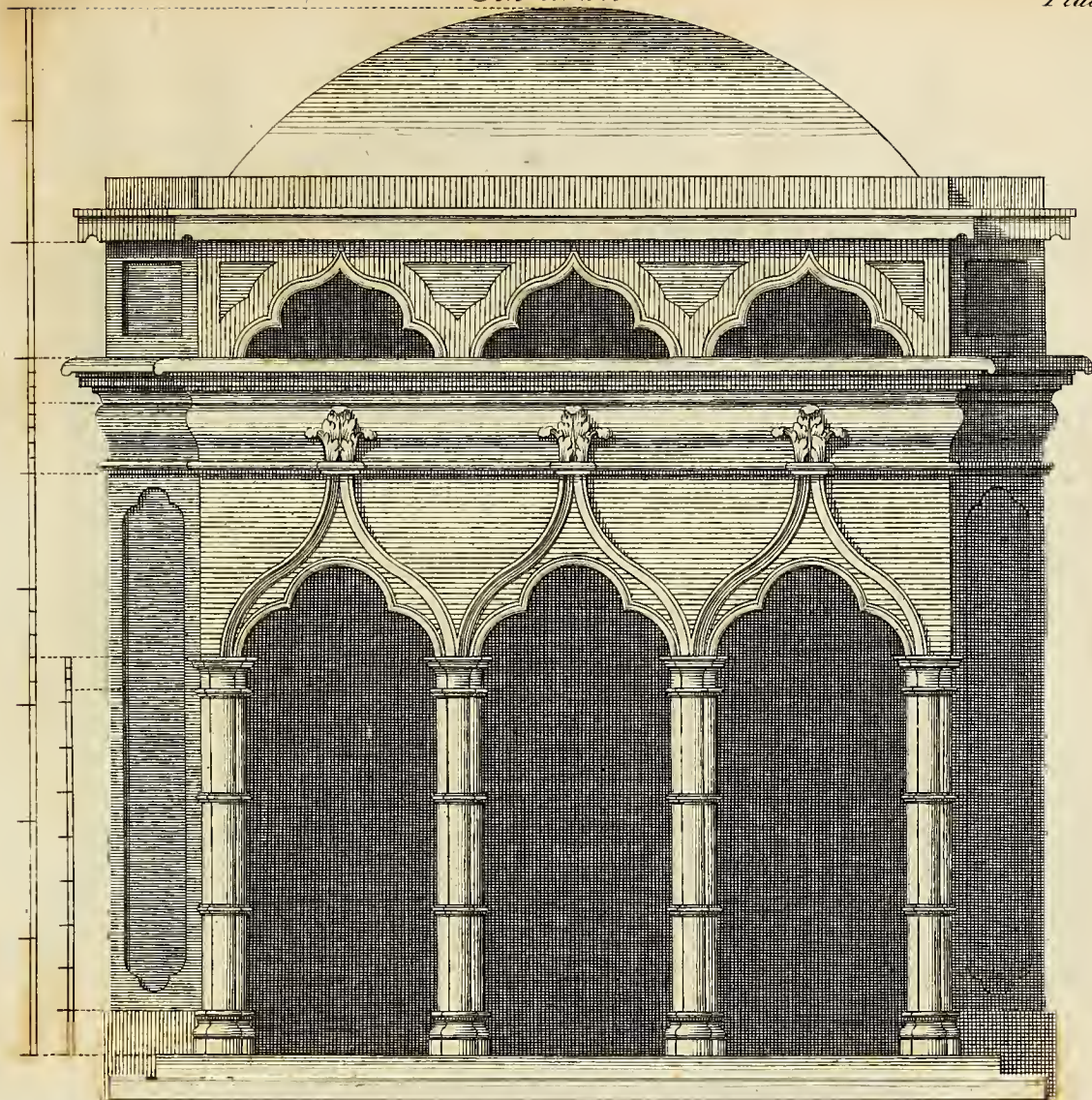


Batty Langley Inv. 1742

T. L. Sc.

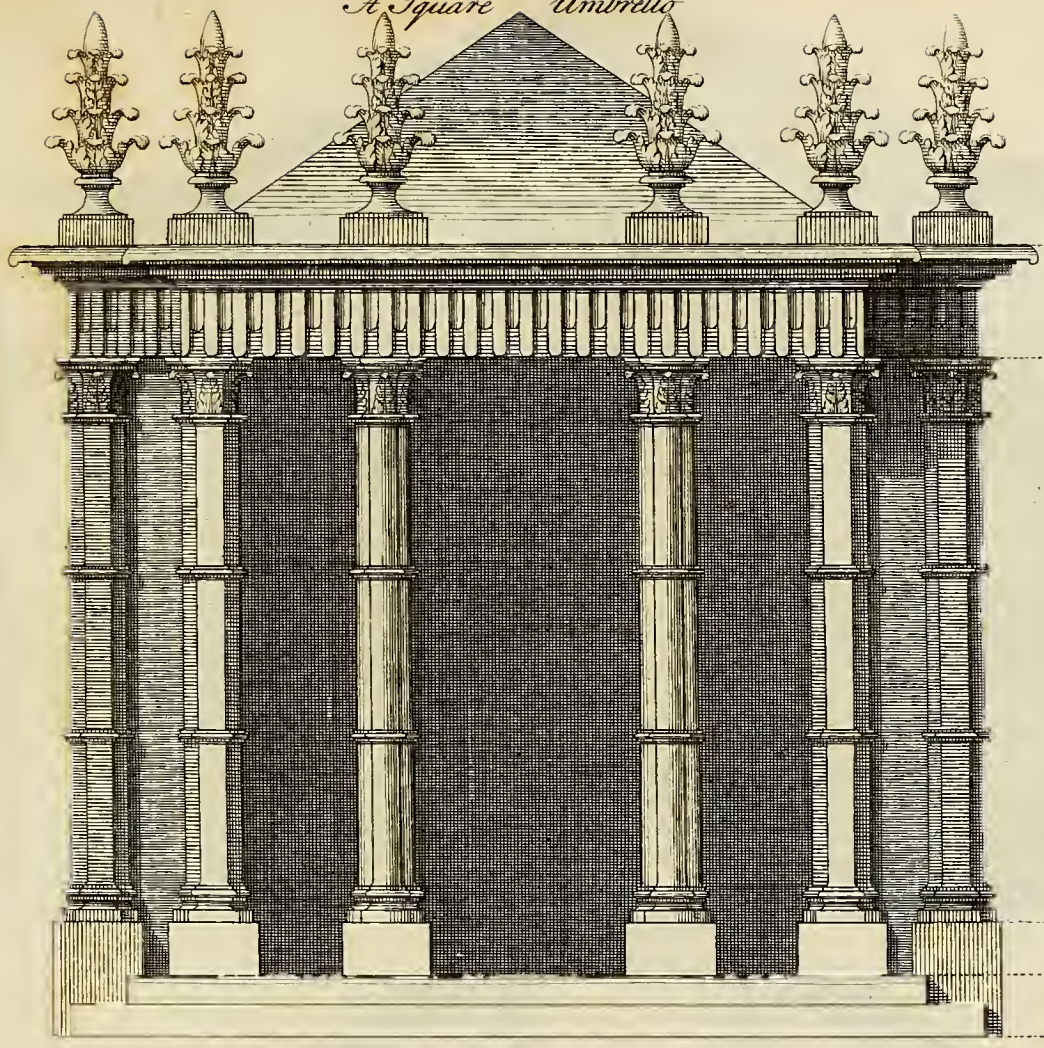




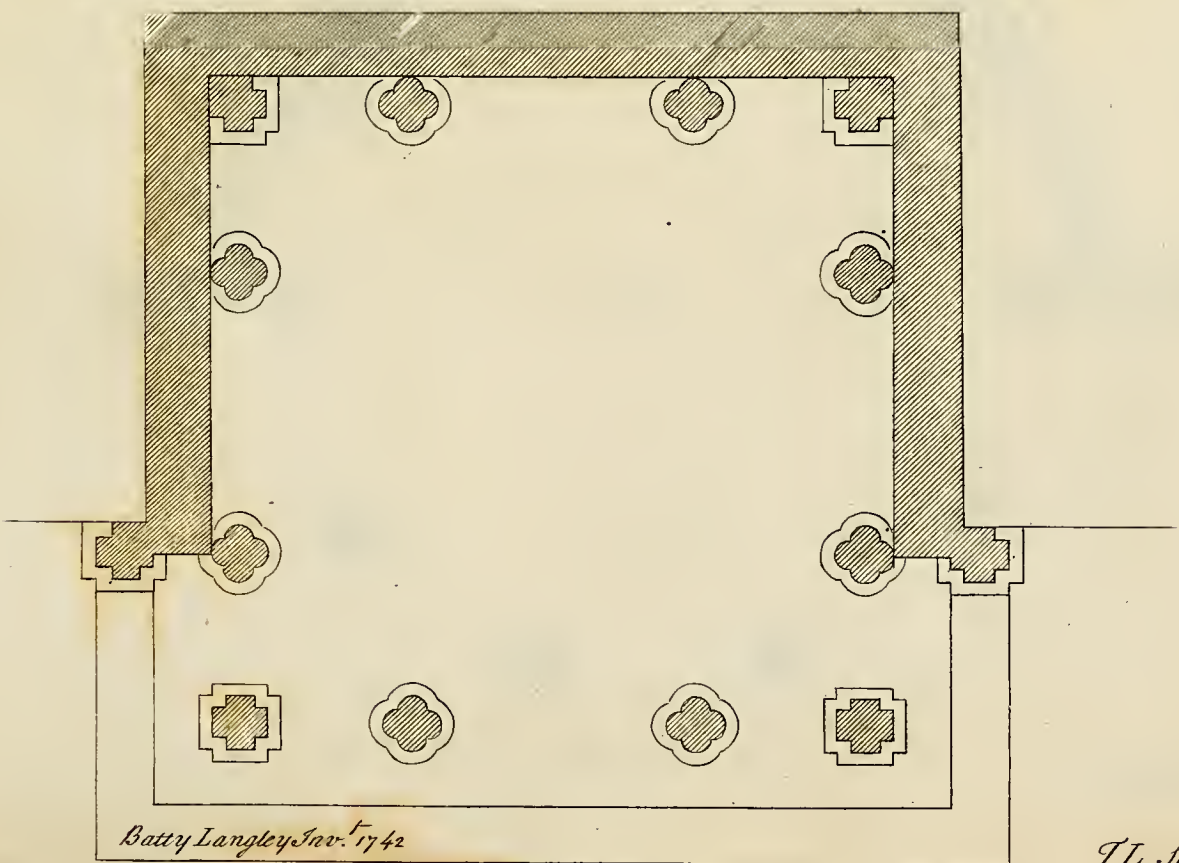


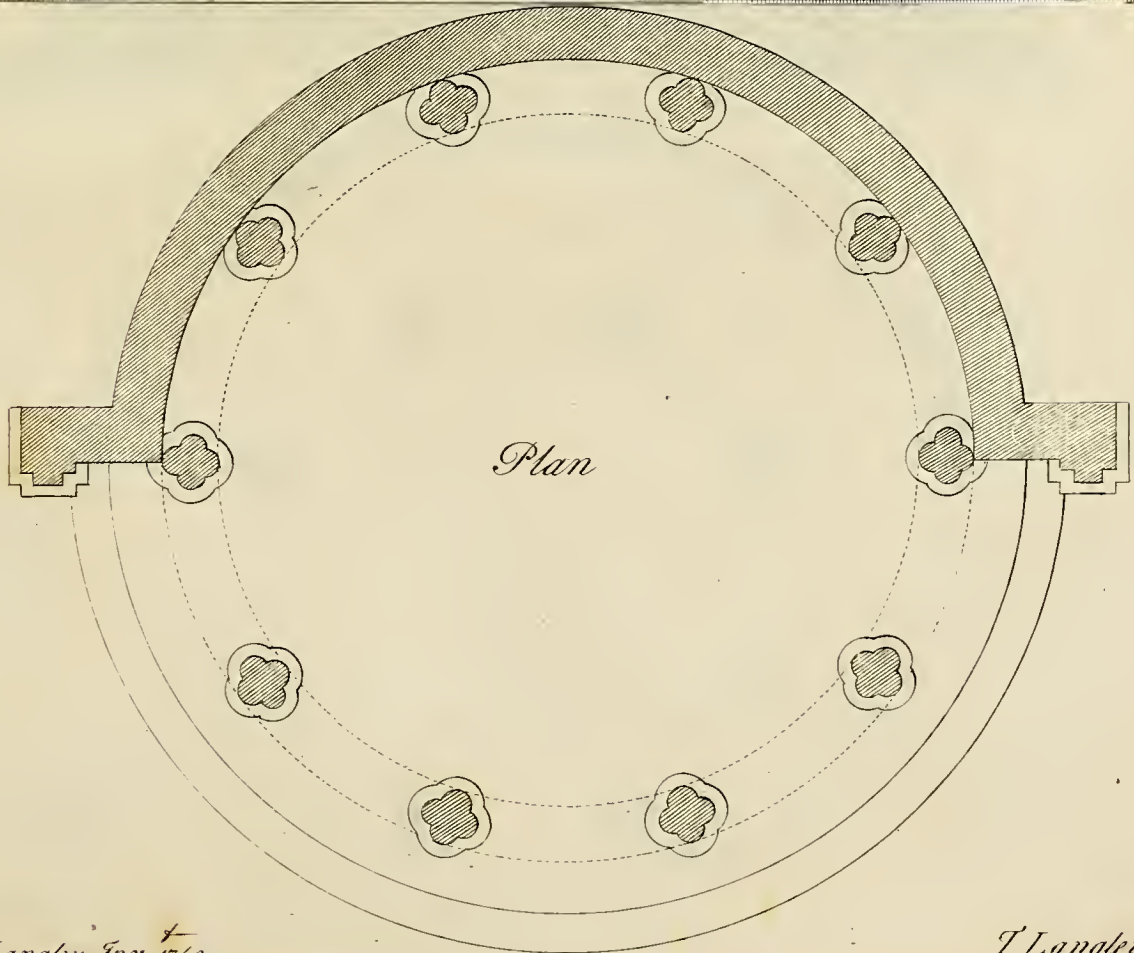
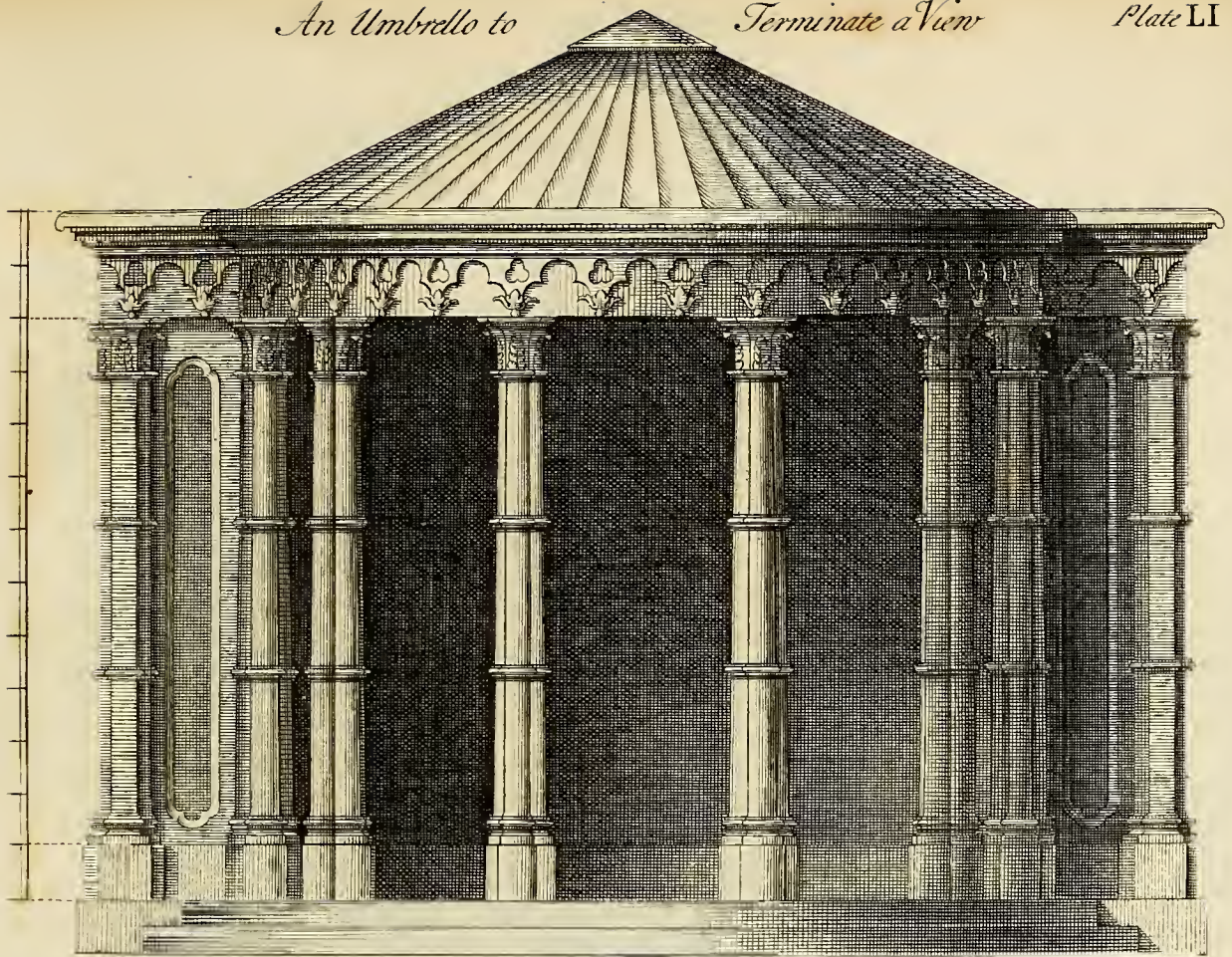


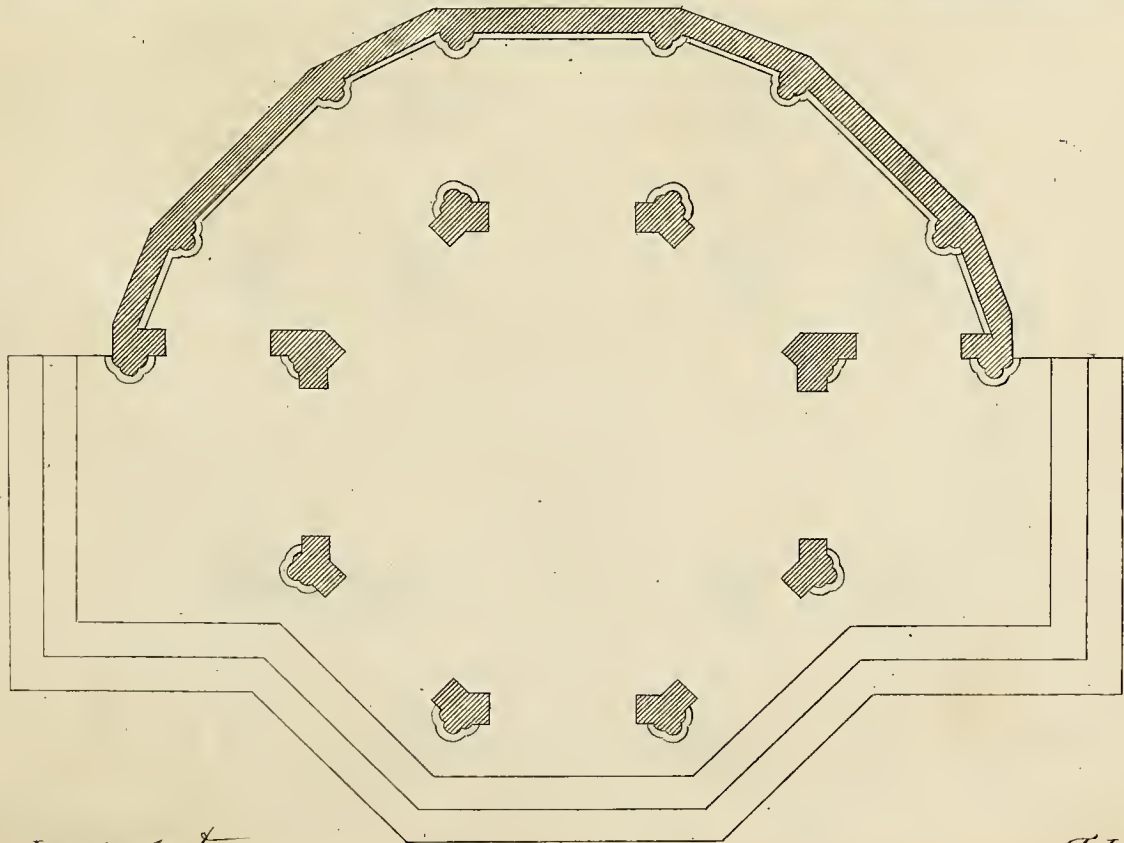
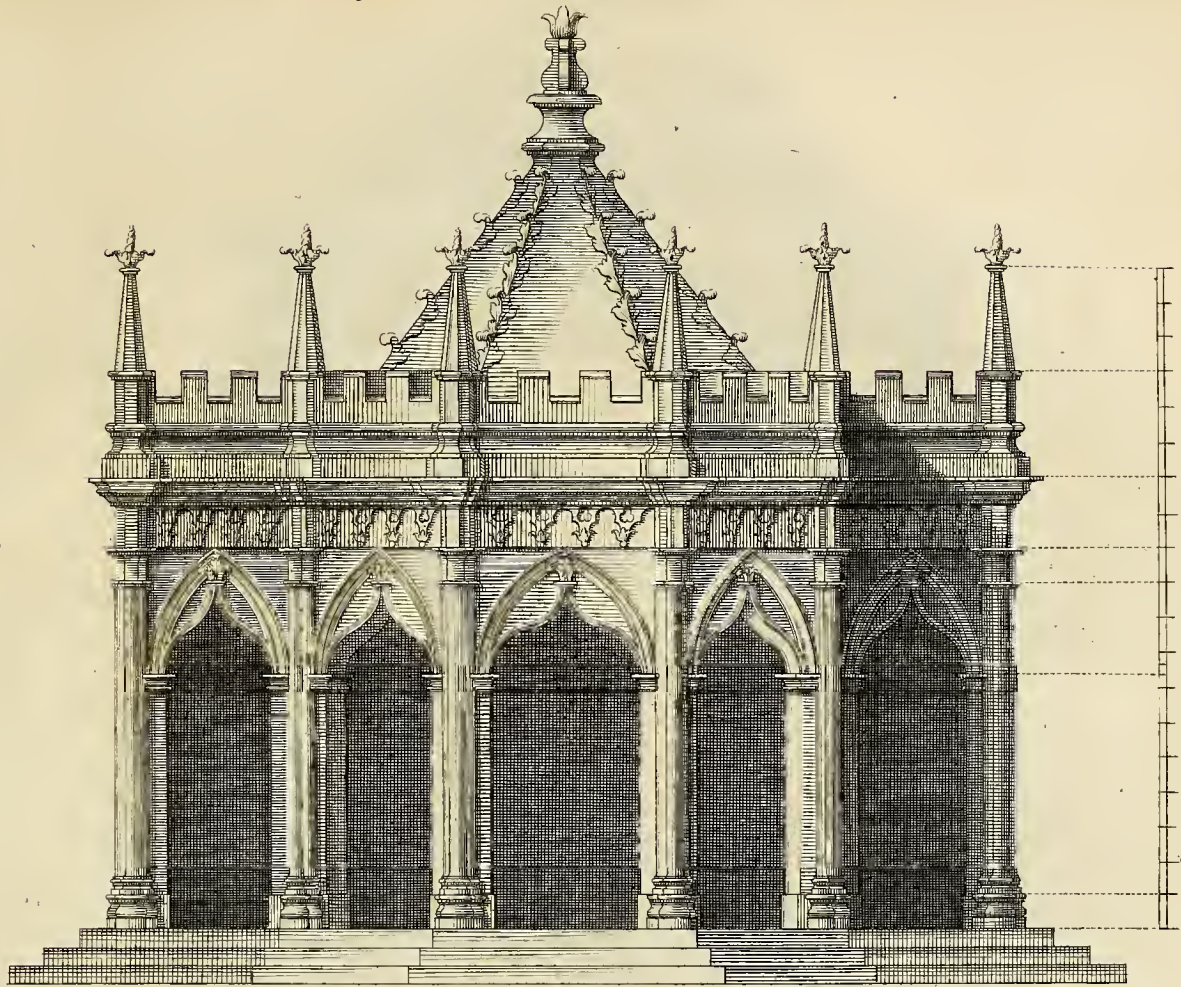
A Square Umbrello

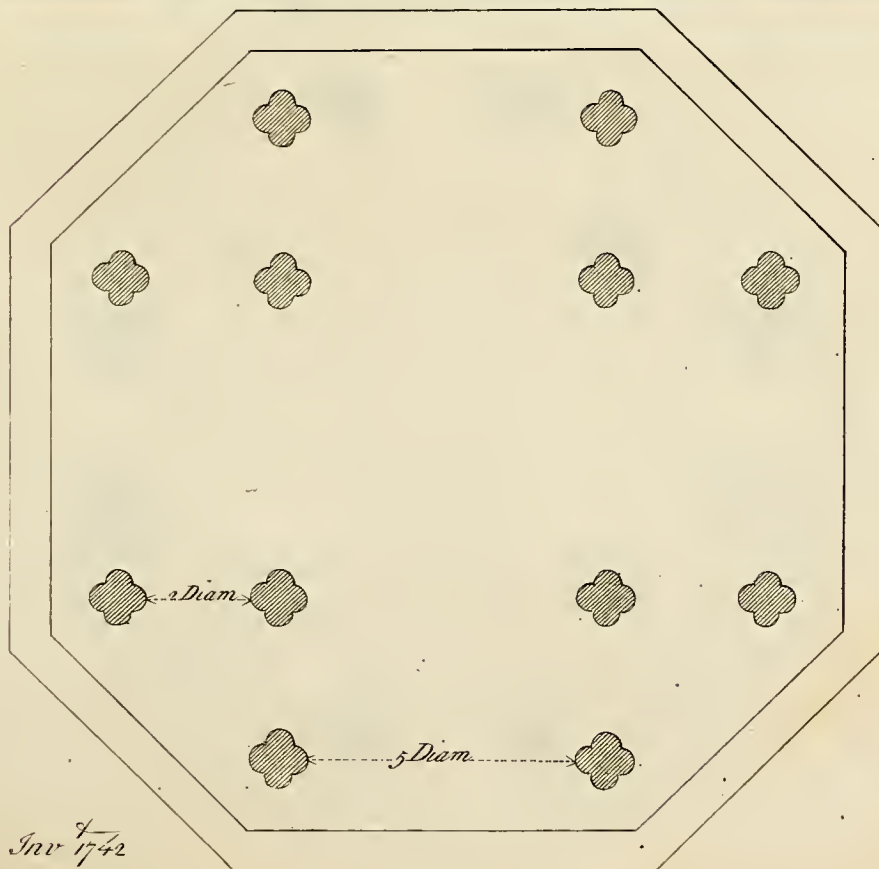
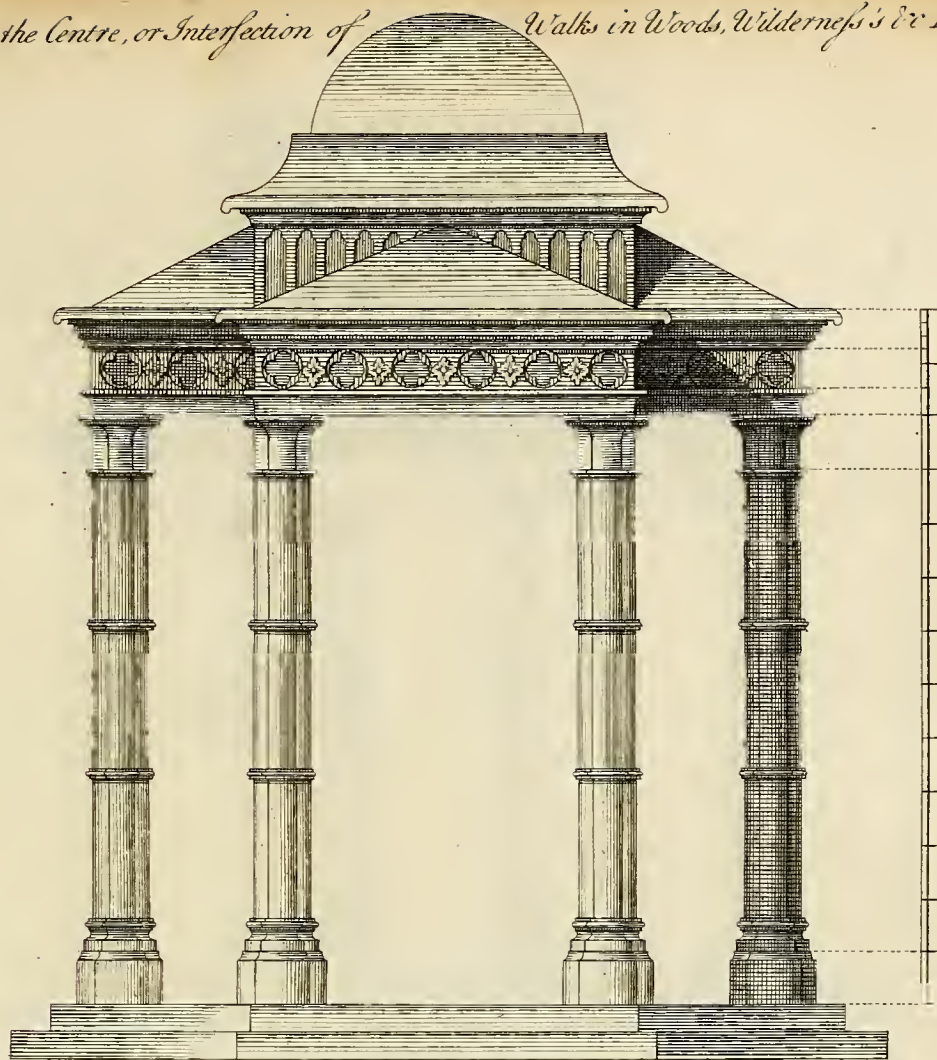


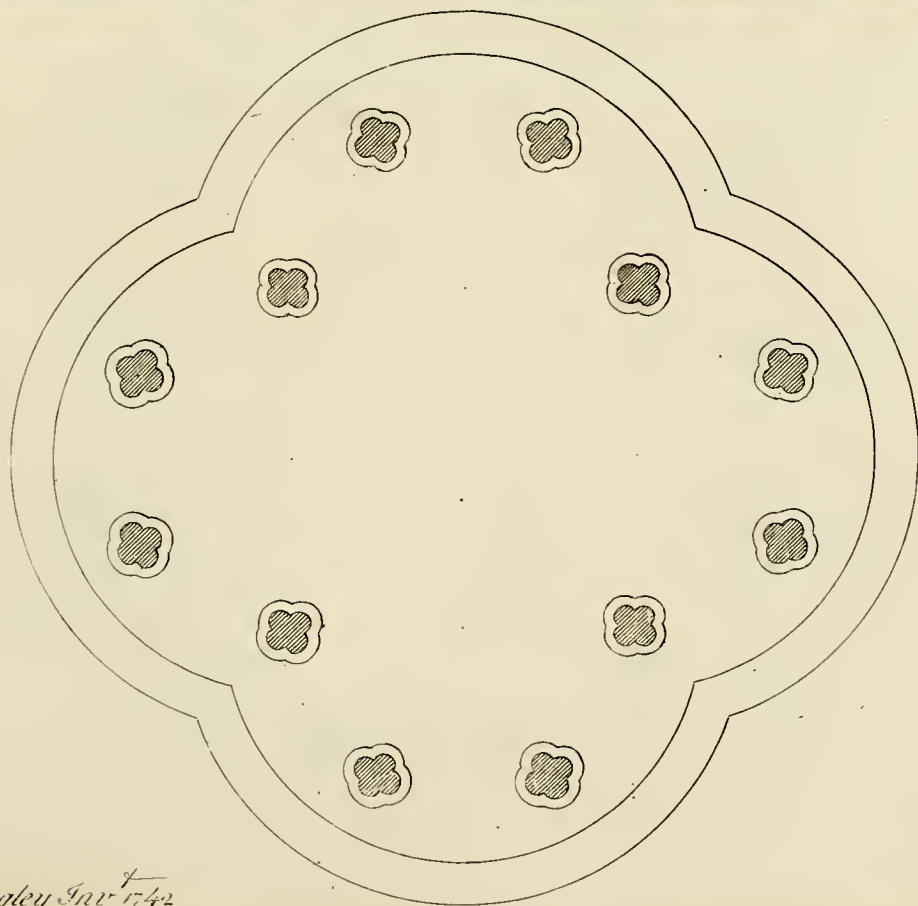
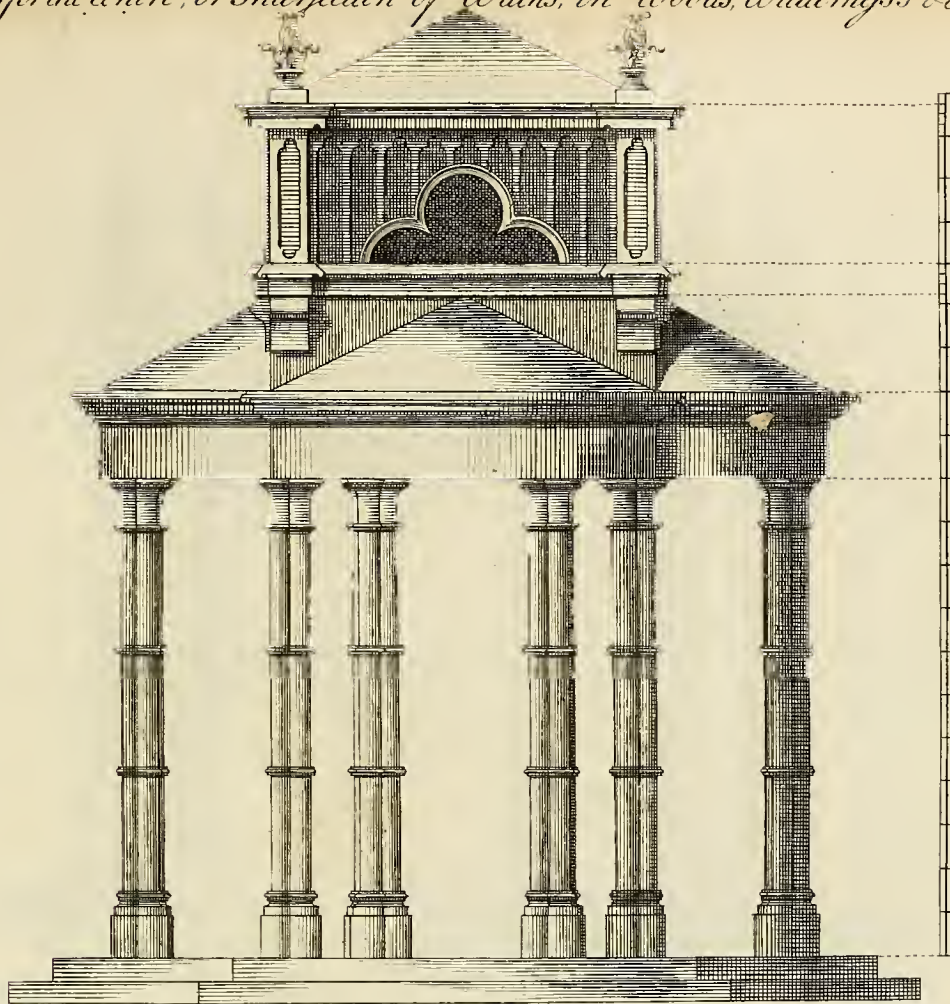
18 parts

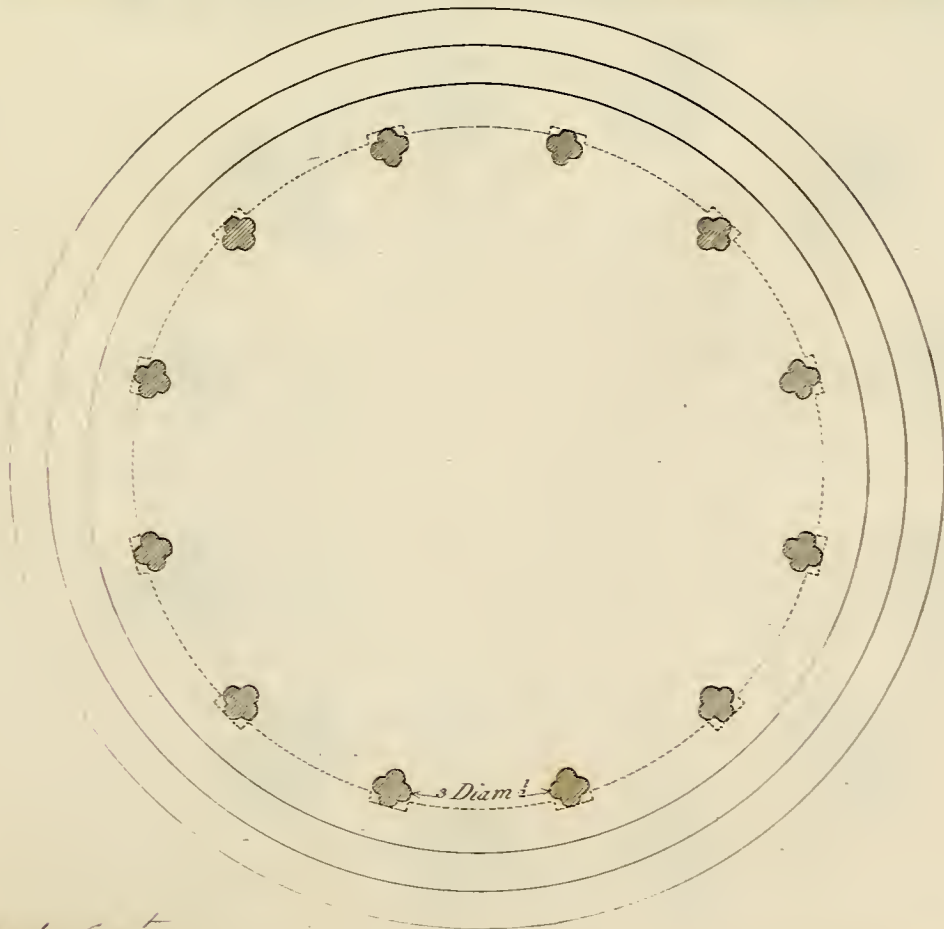
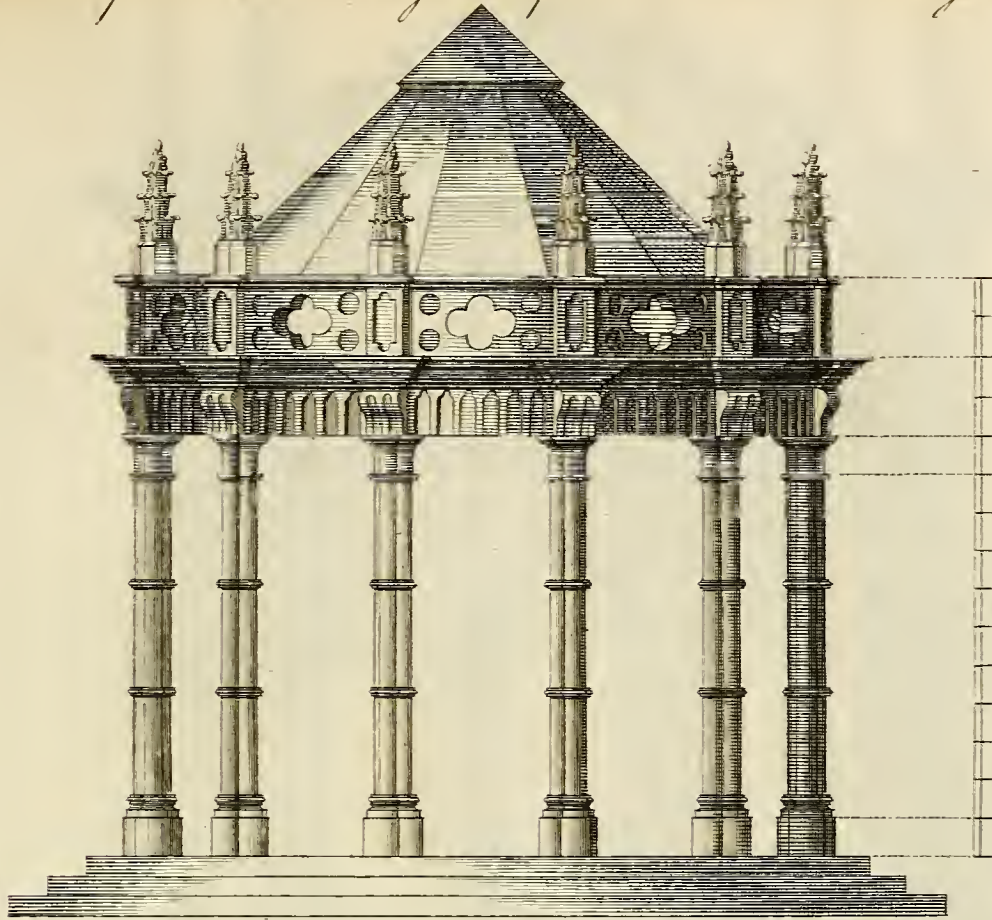








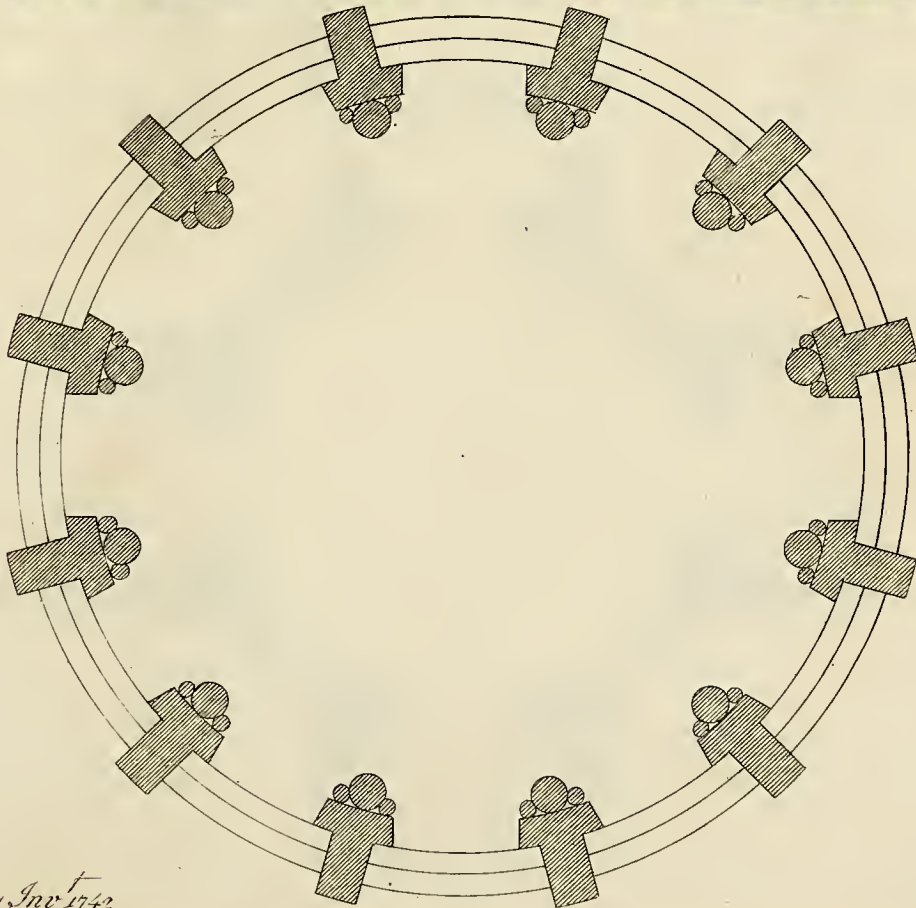
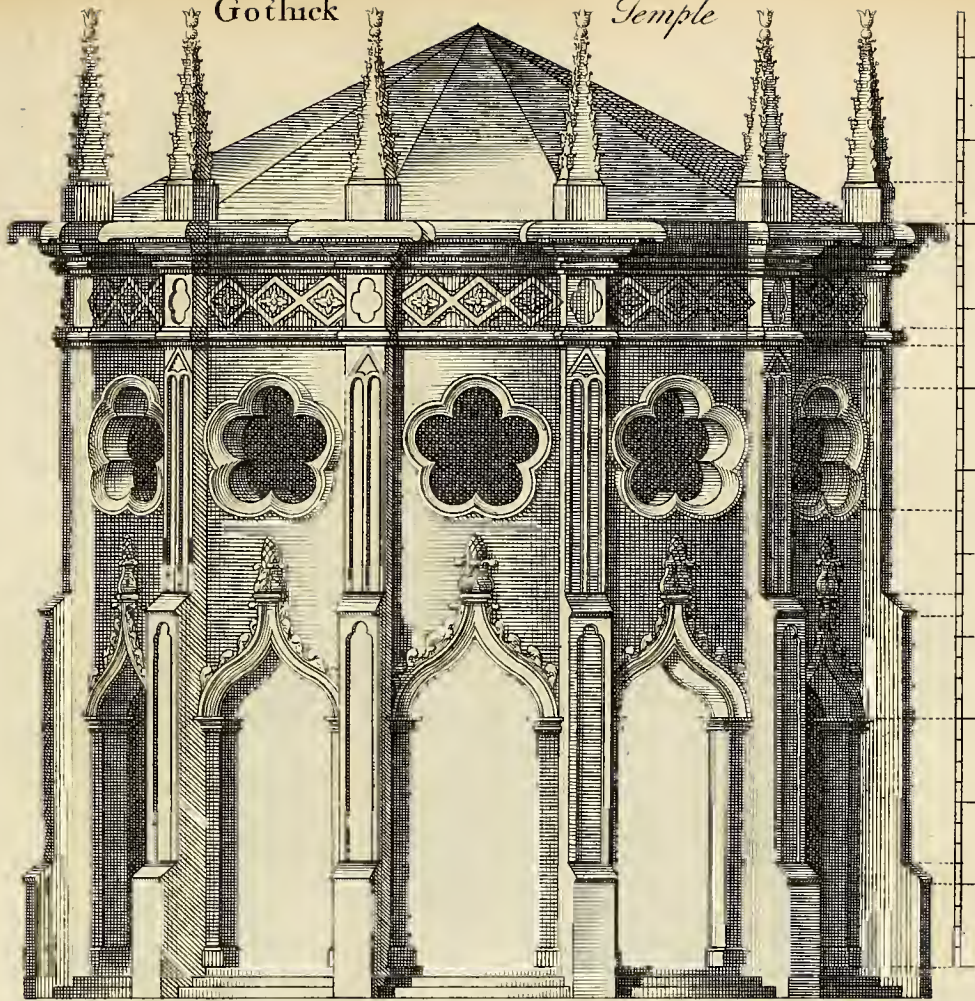




Gothick

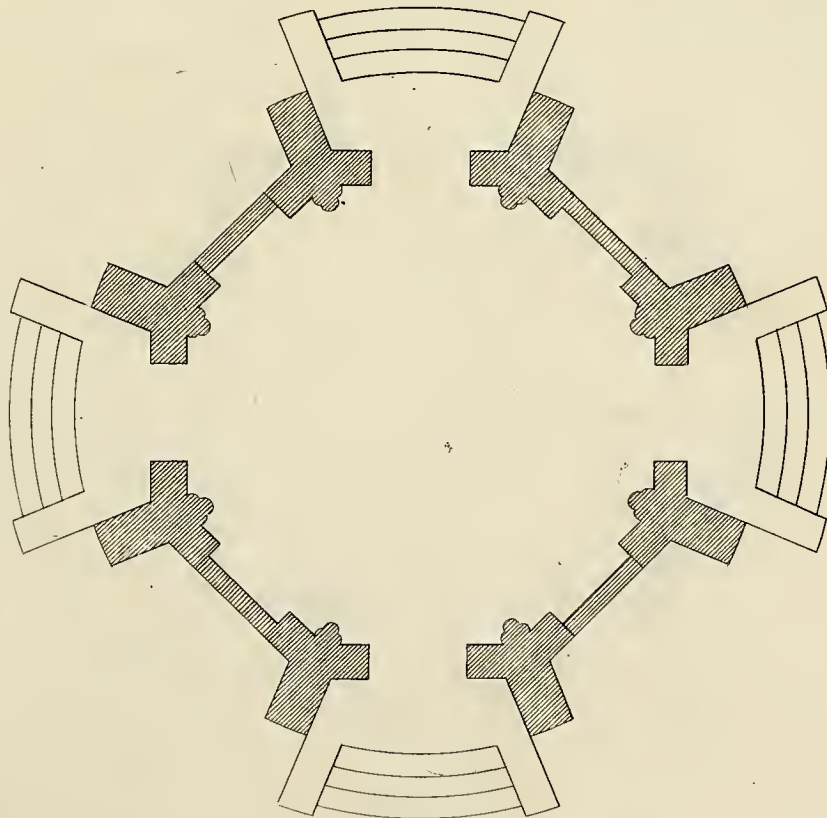
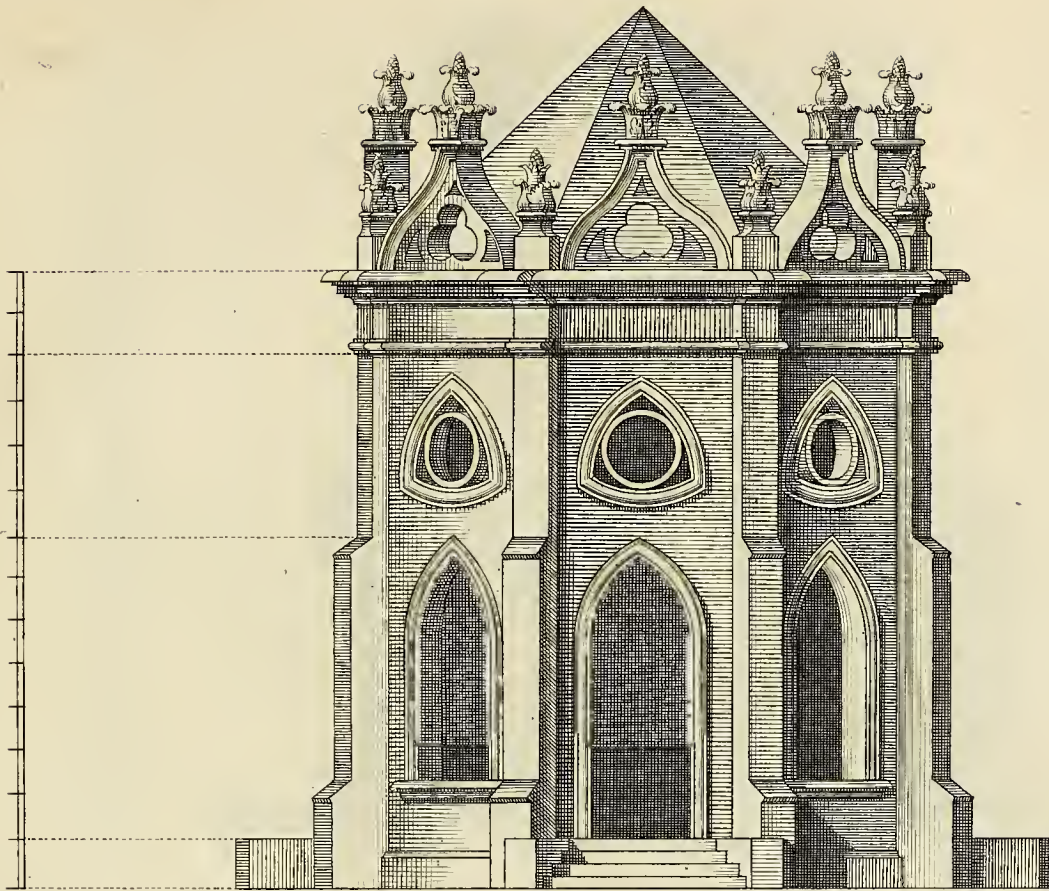
Temple

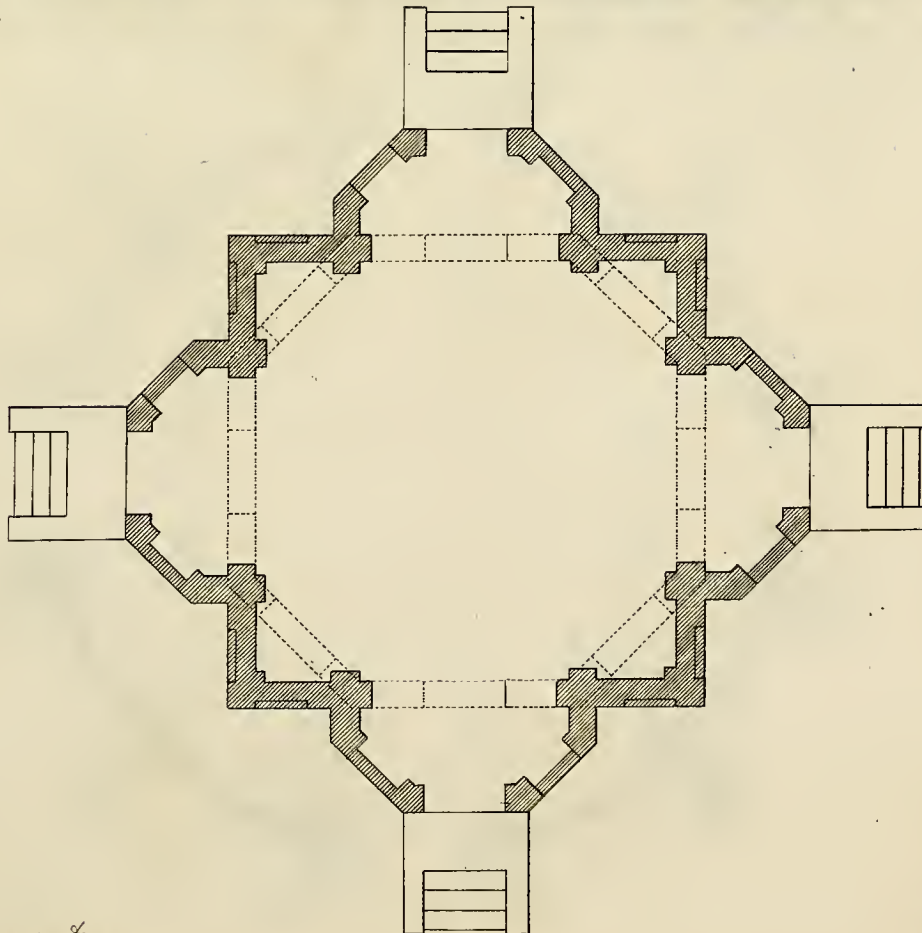
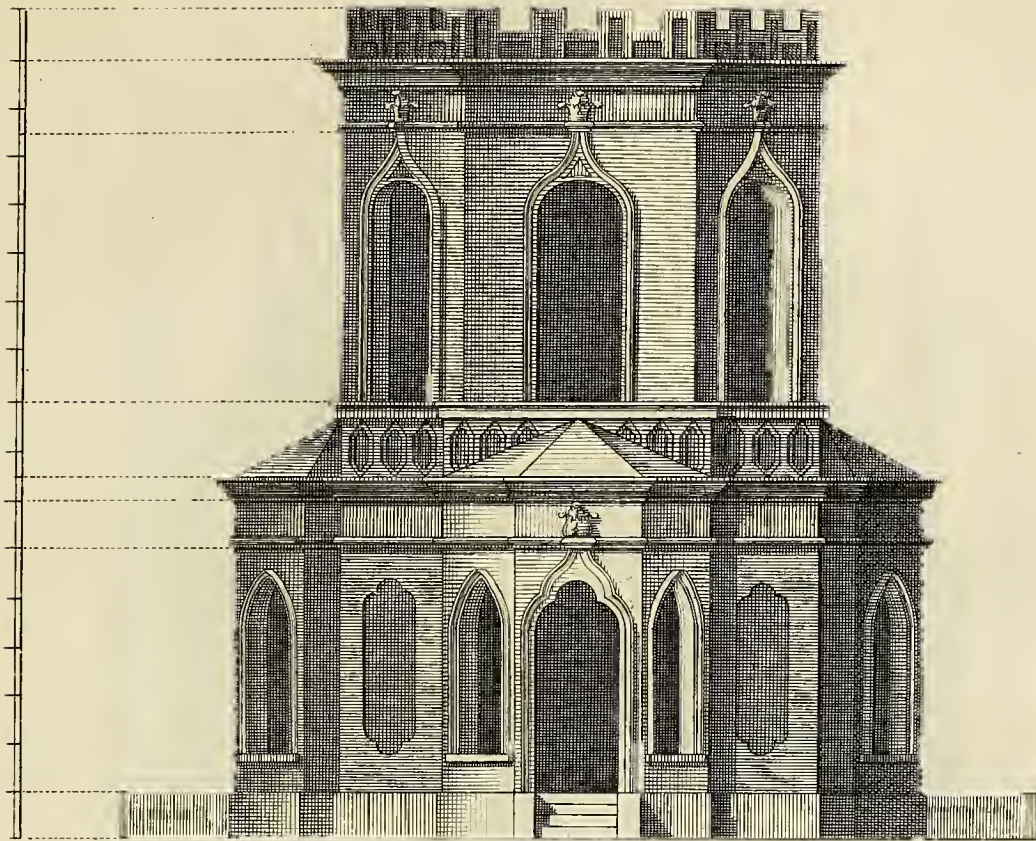
Plate LVI

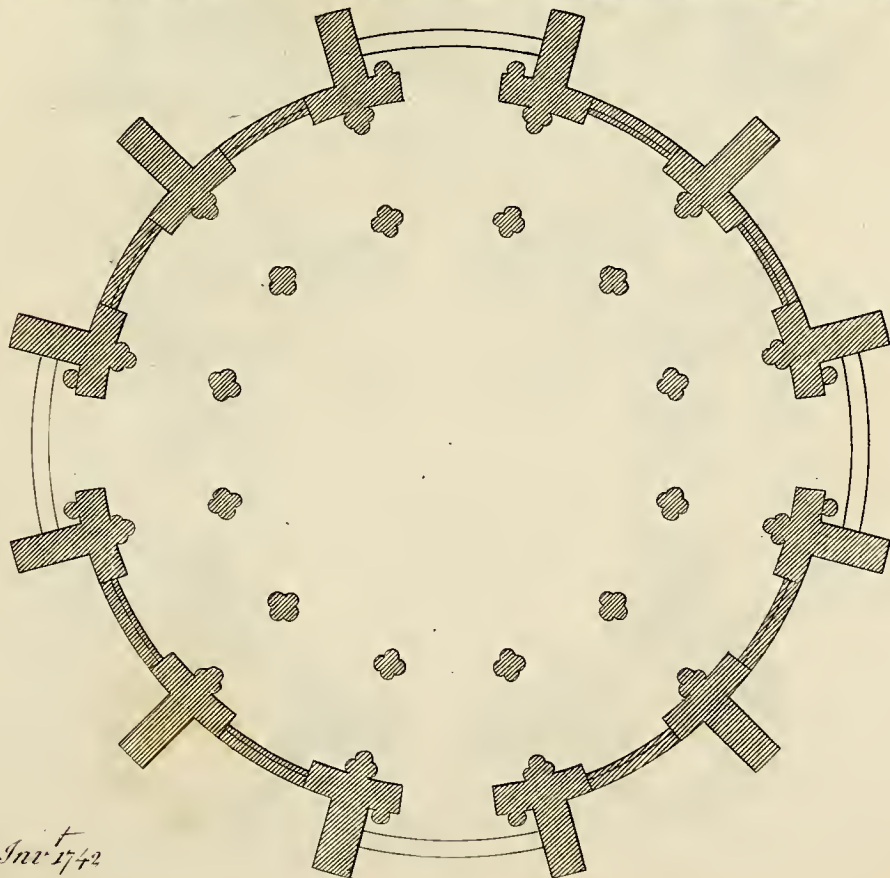
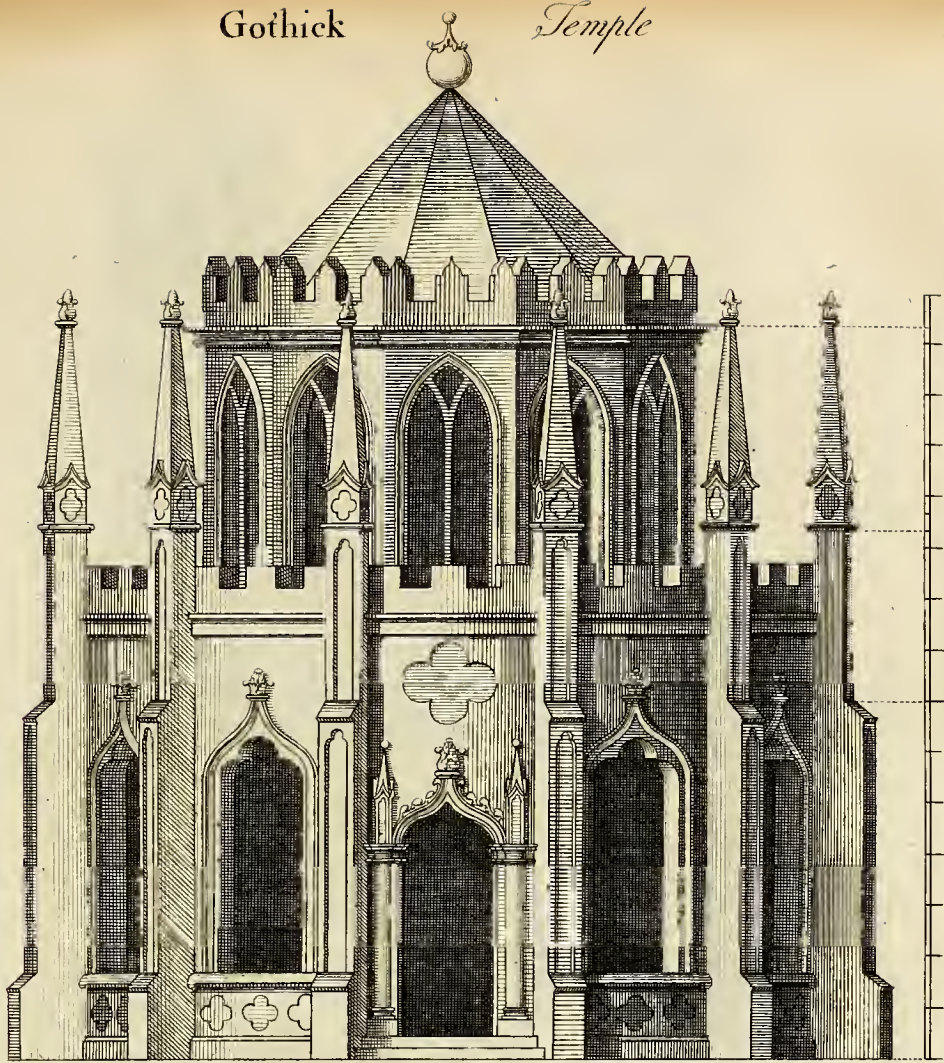


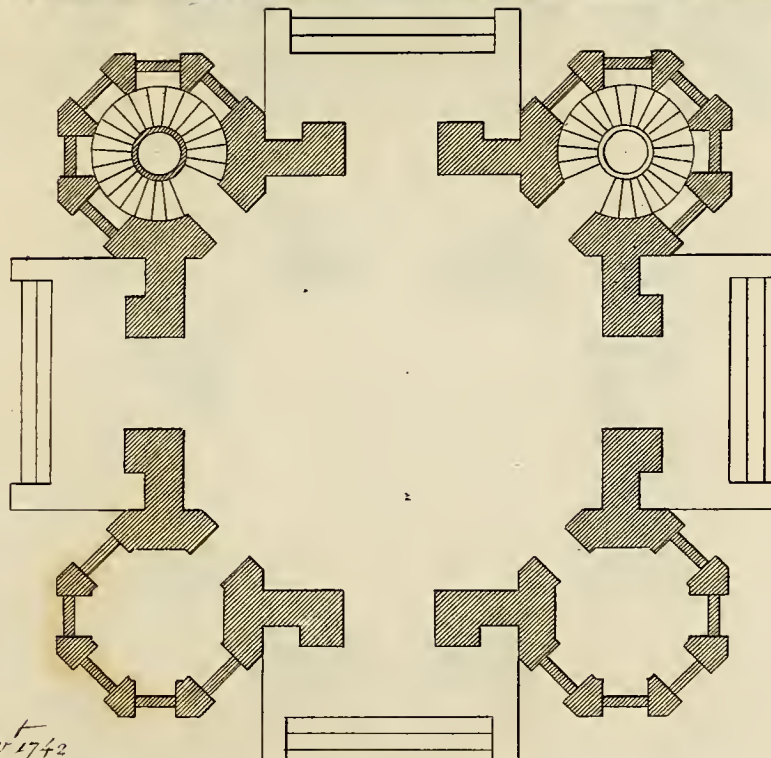
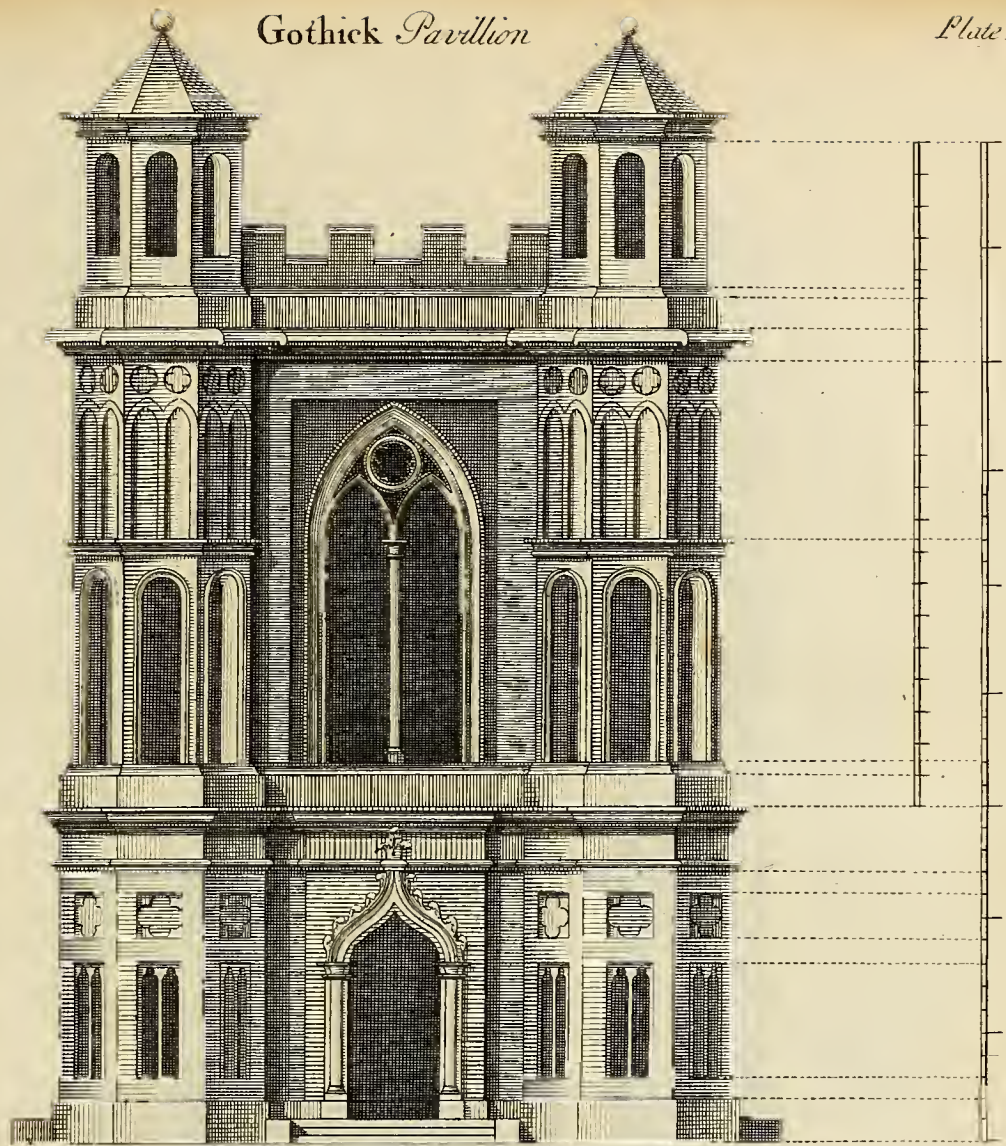
Batty Langley Inv^t 1742

J.L. Sculp

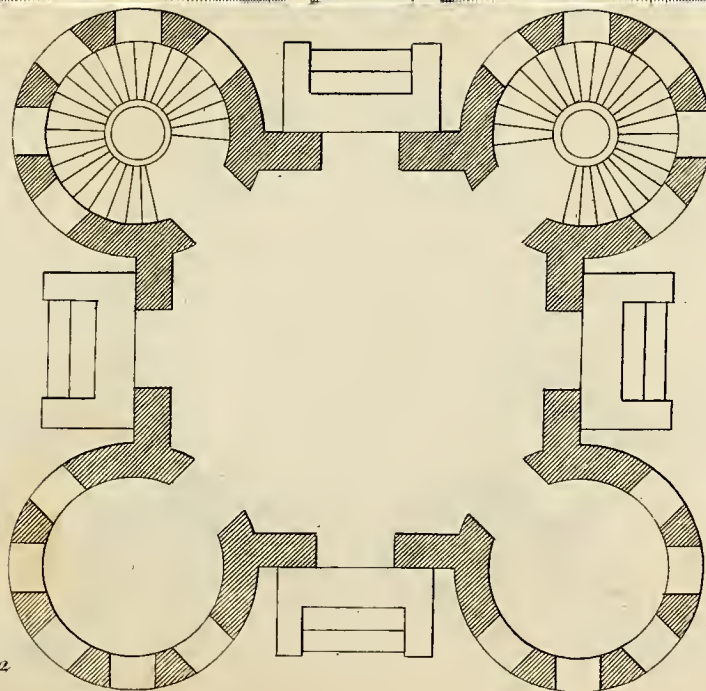
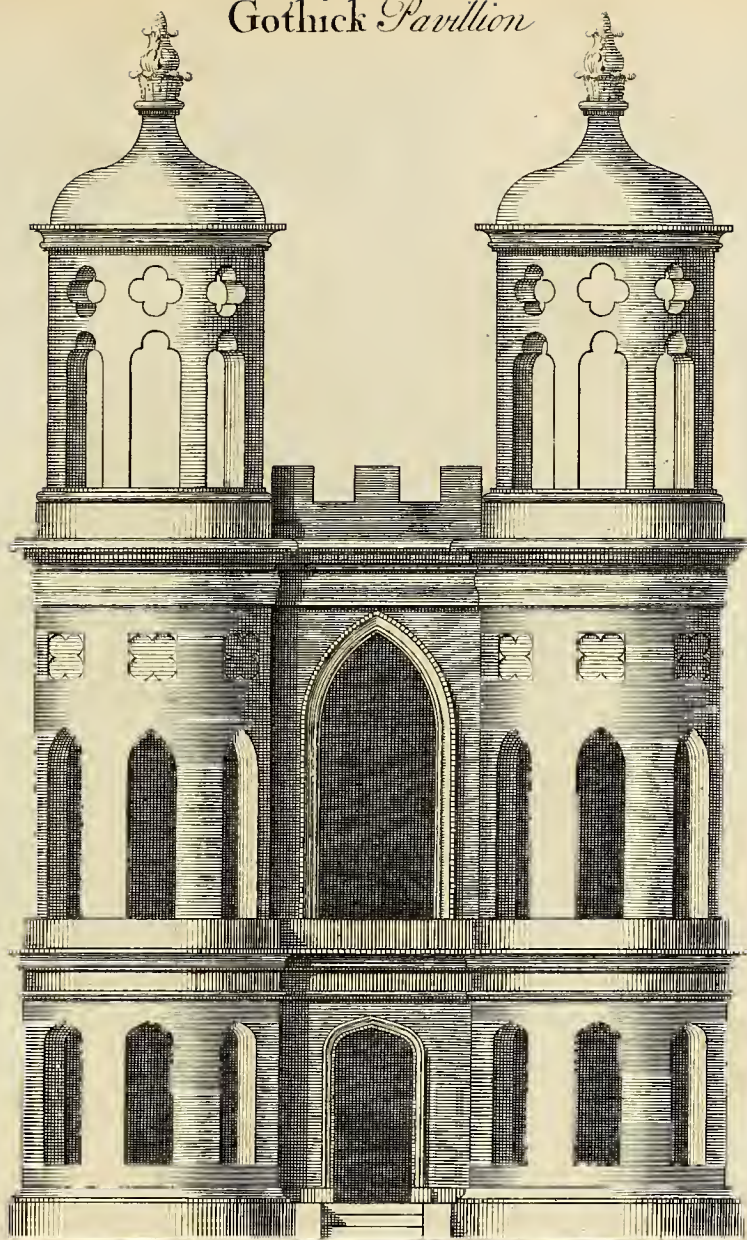


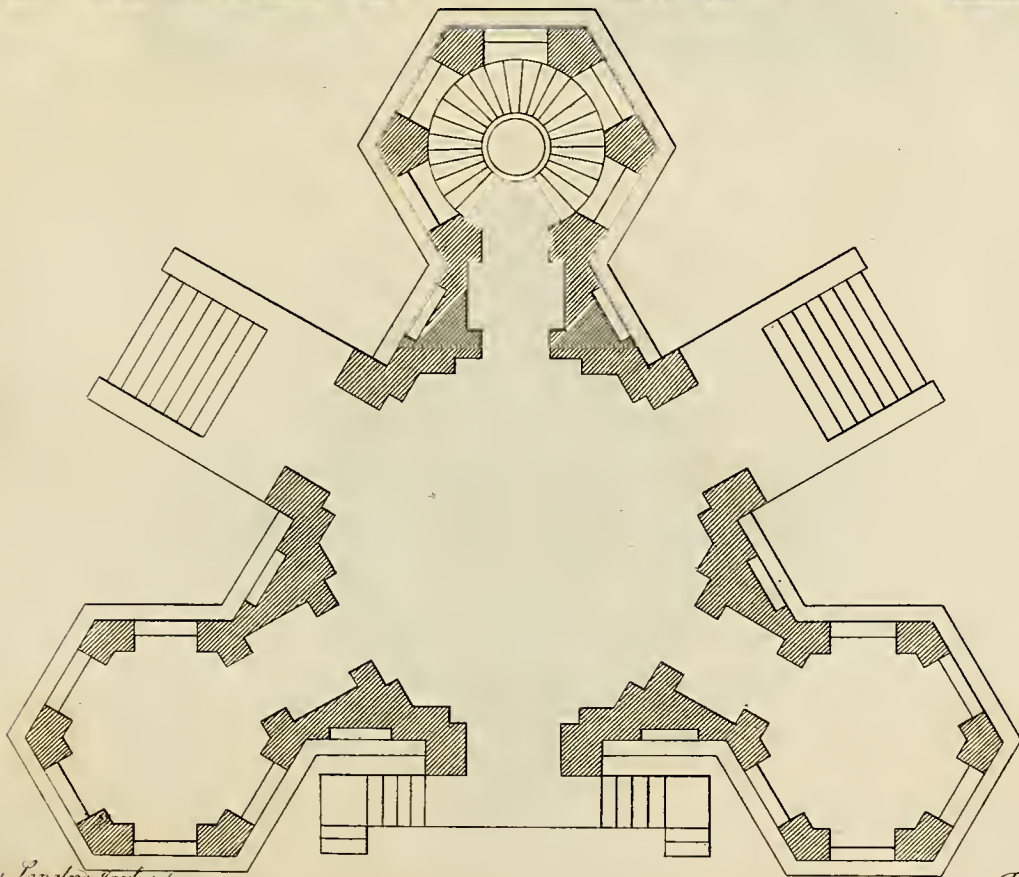
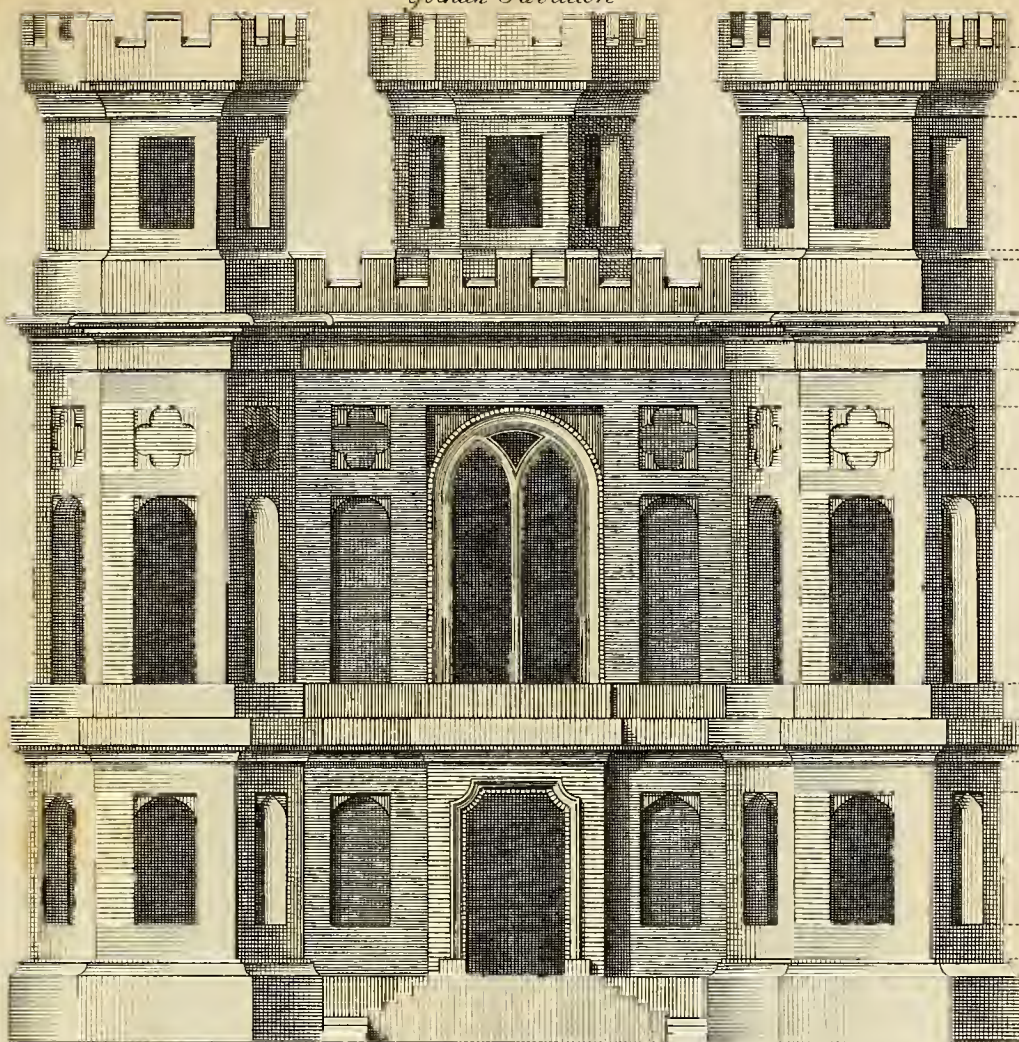








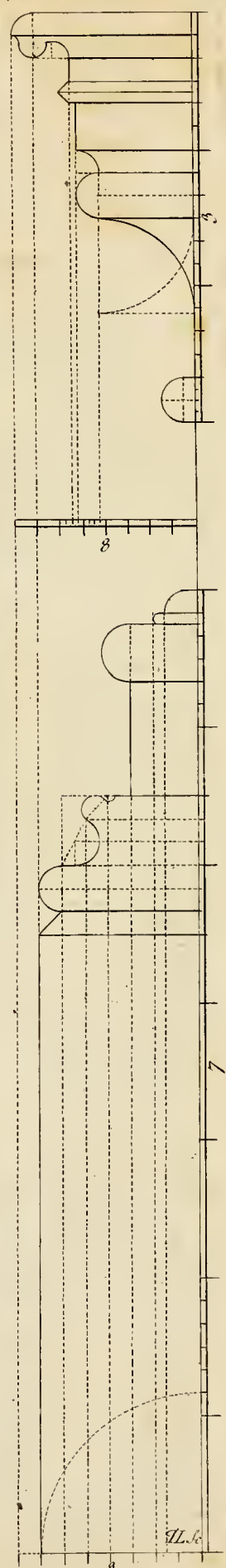
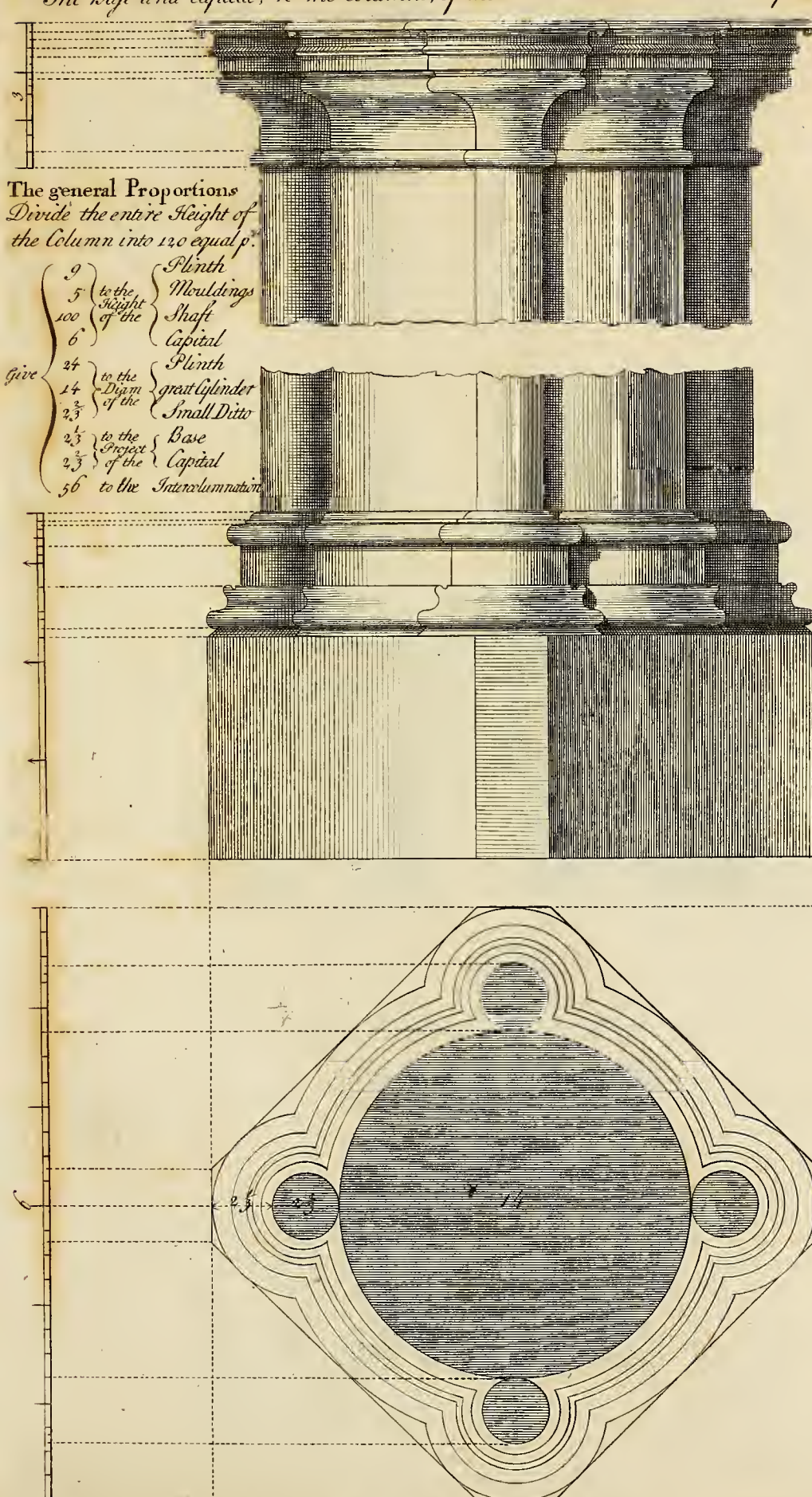




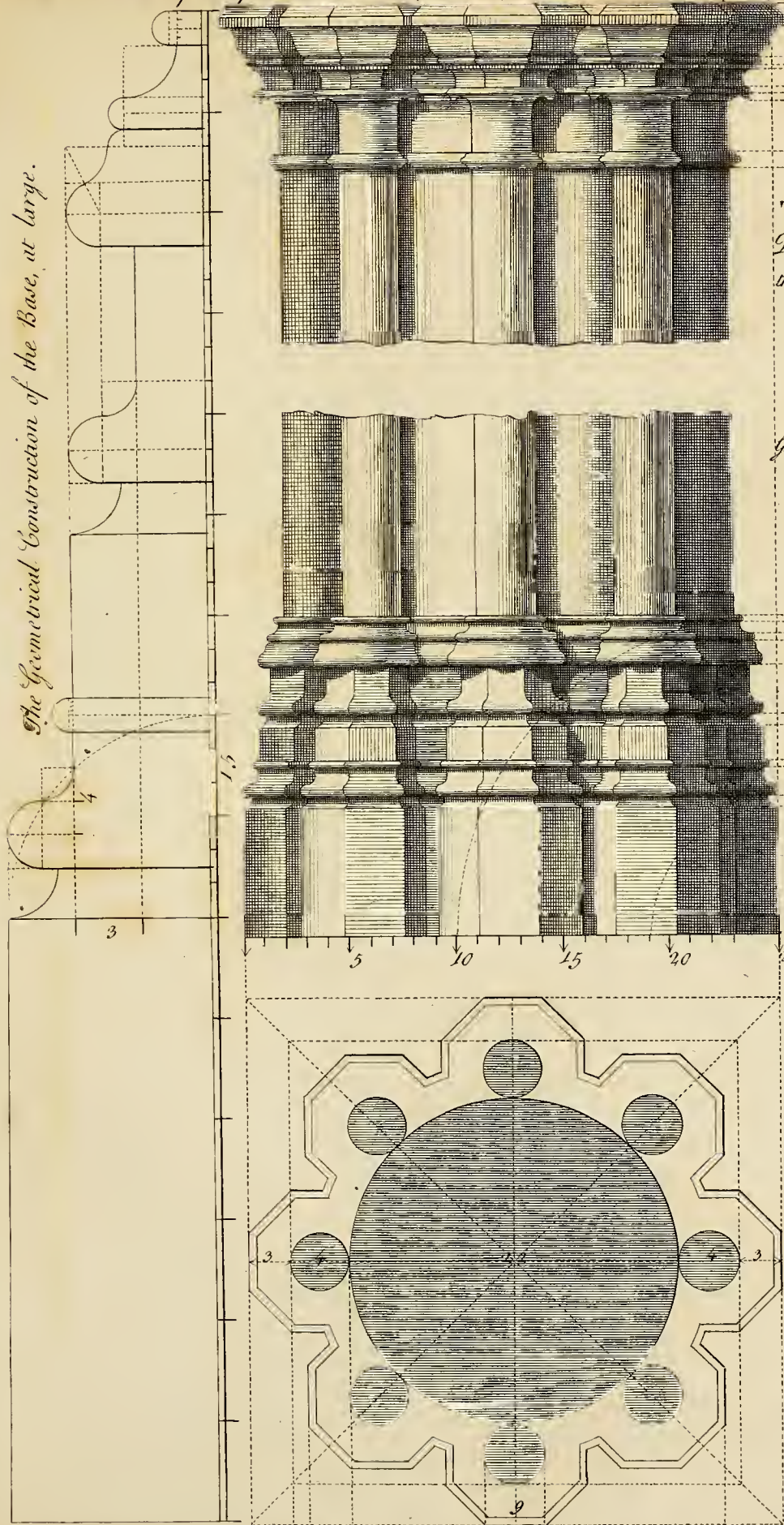
The Base and Capital, to the Columns, of the Choir in Westminster Abby, built by Hen. III. Plate A

The general Proportions
Divide the entire Height of
the Column into 120 equal p.

Give $\left\{ \begin{array}{l} 9 \\ 5 \\ 100 \\ 6 \end{array} \right\}$ to the $\left\{ \begin{array}{l} \text{Plinth} \\ \text{Mouldings} \\ \text{Shaft} \\ \text{Capital} \end{array} \right\}$
 $\left\{ \begin{array}{l} 24 \\ 14 \\ 2\frac{2}{3} \end{array} \right\}$ to the $\left\{ \begin{array}{l} \text{Plinth} \\ \text{great Cylinder} \\ \text{Small Ditto} \end{array} \right\}$
 $\left\{ \begin{array}{l} 2\frac{1}{3} \\ 2\frac{2}{3} \end{array} \right\}$ to the $\left\{ \begin{array}{l} \text{Base} \\ \text{Capital} \end{array} \right\}$
 56 to the Intercolumnation



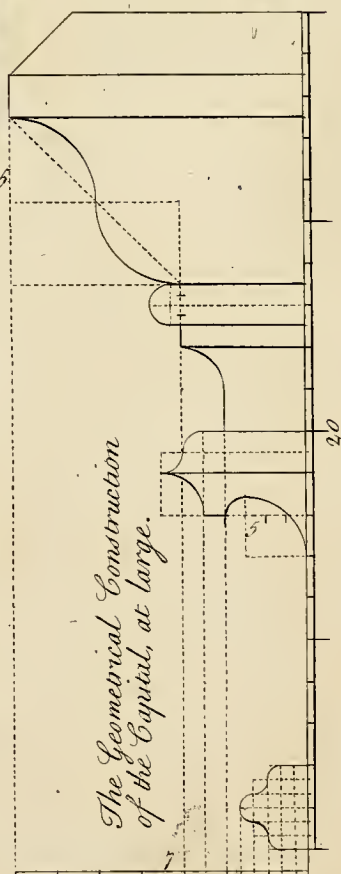
The Geometrical Construction of the Base, at large.



The general Proportions
Divide the entire Height of
the Column, into 130 equal Parts.

8	to the Height of the	{	Plinth
14			Mouldings
147			Shaft
11			Capital
Give 36	to the Diam: of the	{	Plinth
22			great Cylinder
4			Small Ditto
3	to the Project ⁿ of the	{	Base
4 $\frac{1}{2}$			Capital

The Geometrical Construction
of the Capital, at large.



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